SQT

THE NIMBUS 5 DATA CATALOG

VOLUME 7

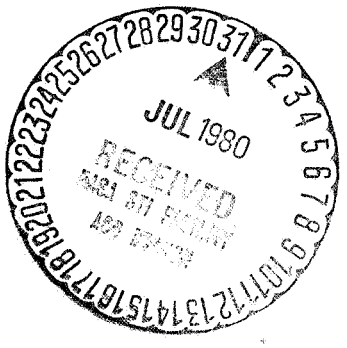
1 DECEMBER 1973 THROUGH 31 JANUARY 1974

DATA ORBITS 4762 THROUGH 5593

(NASA-CR-163400) THE NIMBUS 5 DATA CATALOG. VOLUME 7: 1 DECEMBER 1973 - 31 JANUARY 1974, DATA ORBITS 4762 - 5593 (Allied Research Associates, Inc.) 413 p

N80-75248

Unclas
00/47 16923



GODDARD SPACE FLIGHT CENTER

GREENBELT, MARYLAND

THE NIMBUS 5 DATA CATALOG

Volume 7

1 December 1973 through 31 January 1974
Data Orbits 4762 through 5593

Prepared by

Allied Research Associates, Inc.
Baltimore, Maryland

For the

ERTS/Nimbus Project

June 1974

GODDARD SPACE FLIGHT CENTER
Greenbelt, Maryland

FOREWORD

This is the seventh volume of a series of catalogs published by the National Aeronautics and Space Administration to document data acquired from the Nimbus 5 meteorological satellite. This volume covers the period from 1 December 1973 through 31 January 1974 with subsequent catalogs to contain documentation for succeeding periods throughout the useful lifetime of Nimbus 5.

Background information concerning the Nimbus 5 meteorological satellite system and a description of the experiments and data formats have been published separately in The Nimbus 5 User's Guide, with post-launch User's Guide information changes and corrections included in the data catalogs. The Nimbus 5 catalogs present the type of data available, anomalies in the data, if any, and geographic location and time of the data.

The assembly and editing of this catalog was accomplished by Allied Research Associates, Inc. (ARA), Baltimore, Maryland, under contract number NAS 5-21617 with the Goddard Space Flight Center, NASA, Greenbelt, Maryland.

J. Sargent
Project Manager
ERTS/Nimbus Project
Goddard Space Flight Center

CONTENTS

		Page
FOREWORD		iii
SECTION 1.	SUMMARY OF OPERATIONS	1-1
1.1	Introduction	1-1
1.2	The Temperature Humidity Infrared Radiometer (THIR) Subsystem	1-3
1.3	The Surface Composition Mapping Radiometer (SCMR) Experiment	1-3
1.4	The Electrically Scanning Microwave Radiometer (ESMR) Experiment	1-4
1.5	The Infrared Temperature Profile Radiometer (ITPR) Experiment	1-4
1.6	The Selective Chopper Radiometer (SCR) Experiment	1-6
1.7	The Nimbus E Microwave Spectrometer (NEMS) Experiment	1-6
1.8	Biblography on Nimbus 5 for the first year (December 1972 through January 1973)	1-6
SECTION 2.	ORBITAL ELEMENTS AND DATA AVAILABILITY ON-OFF TIMES	2-1
SECTION 3.	ELECTRICALLY SCANNING MICROWAVE RADIOMETER DISPLAYS	3-1
SECTION 4.	TEMPERATURE HUMIDITY INFRARED RADIOMETER MONTAGES	4-1
4.1	THIR Nighttime Montages	4-3
4.2	THIR Daytime Montages	4-129
SECTION 5.	CORRECTIONS TO THE NIMBUS 5 USER'S GUIDE	5-1
5.1	THIR Corrections to the User's Guide	5-1
5.2	SCMR Corrections to the User's Guide	5-3
5.3	ESMR Corrections to the User's Guide	5-3
5.4	ITPR Corrections to the User's Guide	5-7
5.5	SCR Corrections to the User's Guide	5-10
5.6	NEMS Corrections to the User's Guide	5-11

LIST OF FIGURES

Figure		Page
2-1	World Map	2-4
5-1	Weighting Functions of the Temperature Sounding Channels of the Nimbus 5 SCR	5-12

LIST OF TABLES

Table		Page
1-1	Nimbus 5 Catalog Documentation Summary	1-1
1-2	Nimbus 5 Pitch Bias History from Orbit 4762 (1 December 1973) through Orbit 5593 (31 January 1974)	1-2
1-3	ESMR Color Images from Launch through 31 January 1974 available at NSSDC	1-5
2-1	Nimbus 5 Brouwer Mean Orbital Elements for December 1973 and January 1974	2-1
2-2	Data Availability On-Off Times	2-5
3-1	ESMR Gray Scale Steps versus Brightness Temperature for Each of the Three Swaths in the ESMR Pictorial Displays	3-2
3-2	ESMR Display Format Programs for December 1973 and January 1974	3-4
4-1	Latitude versus Minutes from Ascending or Descending Node	4-2
5-1	THIR Output Voltages versus Equivalent Blackbody Temperatures at Different Bolometer Temperatures for the 11.5 μ m Channel	5-1
5-2	THIR Output Voltages versus Equivalent Blackbody Temperatures at Different Bolometer Temperatures for the 6.7 μ m Channel	5-2
5-3	Constants for Linear Correction of Brightness Temperatures Corresponding to ESMR Beam Positions	5-5
5-4	ITPR Calibration Constants for the Period 2/7/72 - 2/6/73	5-7
5-5	ITPR Calibration Constants for the Period 2/7/73 - 3/31/73	5-8
5-6	ITPR Calibration Constants for the Period 4/1/73 - 5/31/73	5-8
5-7	ITPR Calibration Constants for the Period 6/1/73 - 7/31/73	5-9
5-8	Correction Coefficients γ and a_γ for the SCR Temperature Sounding Channels	5-11
5-9	SCR B Difference Channel Coeficients β	5-11

SECTION 1

SUMMARY OF OPERATIONS

1.1 Introduction

Nimbus 5 was successfully launched from the Western Test Range at Vandenberg AFB, California, into a near circular orbit (1089 km x 1102 km) at 07 hr. 56 min. 00 sec. GMT on 11 December 1972. All experiments and subsystems were successfully turned on. Satellite operations from launch (11 December) through orbit 103 (18 December) consisted of engineering evaluation of all spacecraft systems. Therefore, data reception, accountability, and processing were intermittent during that period. Table 1-1 is a summary of the documentation for each Nimbus 5 Data Catalog volume through volume 7.

Table 1-1
Nimbus 5 Catalog Documentation Summary

Volume	Coverage Dates	Orbits
1	19 Dec. 72 - 31 Jan. 73	104 - 693
2	1 Feb. 73 - 31 Mar. 73	694 - 1485
3	1 Apr. 73 - 31 May 73	1486 - 2304
4	1 June 73 - 31 July 73	2305 - 3123
5	1 Aug. 73 - 30 Sept. 73	3124 - 3942
6	1 Oct. 73 - 30 Nov. 73	3943 - 4761
7	1 Dec. 73 - 31 Jan. 73	4762 - 5593

The total operating time for each experiment from launch through orbit 5593 was as follows:

ESMR	8,400 hours	
ITPR	8,403 hours	
NEMS	8,405 hours	
SCR	8,404 hours	
THIR	8,405 hours	
SCMR: direct	29 hours	(No usable SCMR data was
recorded	6 hours	recorded after orbit 320.)

The spacecraft attitude in pitch was biased between +2.9 and +3.5 degrees throughout this catalog period. Table 1-2 shows when each was used. Previous volumes discuss the displacement of earth location points caused by the pitch bias.

The nadir location coordinates on ESMR, ITPR, SCR and NEMS tapes are adjusted to correct for the pitch bias. Grid points on THIR and ESMR images are routinely corrected to match the data points and the grids. Any grid that is still in

Table 1-2

Nimbus 5 Pitch Bias Hisotry
from orbit 4762 (1 December 1973)
through orbit 5593 (31 January 1974)

Date	Orbit	+2.9°	+3.5°
1 December	4762		x
1 December	4768	x	
9 December	4878		x
11 December	4897	x	
13 December	4931		x
15 December	4955	x	
15 December	4958		x
15 December	4959	x	
20 December	5022		x
22 December	5046	x	
26 December	5102		x
28 December	5130	x	
31 December	5174		x
2 January	5202	x	
6 January	5246		x
7 January	5270	x	
11 January	5318		x
13 January	5344	x	
19 January	5429		x
21 January	5451	x	
31 January	5593	x	

error by more than 60 n.m. is identified in Table 2-2 under the column headed "Grid Correction". THIR and ESMR grid print maps, available through NSSDC, are also adjusted so that the data points and their coordinates match.

Roll and yaw attitude control have been within nominal limits during this period.

Data quality from both HDRSS recorders continues to be good. However, since June, the amplitude of the flutter on HDRSS A has been twice that of HDRSS B. Thus, HDRSS A use is restricted to one orbit per day during the blind period when two tape recorders are required for global coverage.

The power, command/clock, Versatile Information Processor (VIP), and thermal subsystem performances continued to be satisfactory during this period.

Subsections 1.2 through 1.7 of this catalog summarize the operational highlights of the individual experiments and call attention to known data anomalies. Section 2 lists the time for which data was received and is available for study for each experiment. Sections 3 and 4 show ESMR and THIR imagery, while Section 5 presents corrections to The Nimbus 5 User's Guide.

The user is referred to The Nimbus 5 User's Guide for a complete description of each experiment and to Section 1.7 of that Guide for the requesting procedure and sources for all data. Sections 2, 3, and 4 of this Data Catalog should help the user to select data to meet his needs.

1.2 The Temperature Humidity Infrared Radiometer (THIR) Subsystem

The quality of THIR data from both channels has been good. Root mean square (rms) THIR temperature variations, due to HDRSS type recorder and system noise, are near 2.4° K for HDRSS B and 3.6° K for HDRSS A. The higher HDRSS A value is attributed to higher flutter in its recorder system.

1.3 The Surface Composition Mapping Radiometer (SCMR) Experiment

The SCMR experiment collected and returned approximately 35 hours of instrument data during the first 320 orbits. Intermittent loss of a scan mirror synchronization pulse caused a loss of useful data output whenever this occurred. This synchronization problem progressed to the point where no useful data could be obtained after orbit 320 (4 January 1973).

Users who desire SCMR data or information should write to Dr. Warren G. Hovis, Code 940, Goddard Space Flight Center, Greenbelt, Maryland 20771.

1.4 The Electrically Scanning Microwave Radiometer (ESMR) Experiment

1.4.1 Performance

The ESMR instrument performance during this period has been satisfactory, although there were times, as shown in Table 3-2 in Section 3, when the instrument operated in a reduced data output mode.

In the reduced data output level mode the instrument brightness temperature response range is between 110° K and 220° K. Its normal response range is between 110° K and about 300° K. Thus, the effect of the malfunction is to narrow the range to which the instrument can respond. There is no way to recover temperature data above 220° K. However, by applying offset corrections, temperature values below 220° K are considered to be accurate to within 10° K. Because many polar and atmospheric phenomena have brightness temperature lower than 220° K, investigations of these phenomena will be only slightly affected by the loss of high brightness temperatures.

On the ESMR image displays (Section 3) the effect of the temperature offset is to completely eliminate data information in swath 3, since its entire display temperature range, 254° K to 290° K, is above the new upper limit. Swath 2 temperature values range from 194° K to 266° K; thus, those values above 220° K are not shown at their true temperature. The offset does not affect values of swath 1, as its temperature limits are 110° K and 200° K.

A semi-quantitive calibration algorithm has been developed for these offset data. These calibrated data, as well as the normal data, are available through NSSDC as described in The Nimbus 5 User's Guide.

1.4.2 ESMR False Color Images

Several computer-processed color images (8" × 10" size) have been produced. Each image is a composite of several consecutive orbits of data. Table 1-3 lists those available through NSSDC. Volume 2 shows two examples (in black and white) of these false color composites. The user is cautioned that several of the South Polar images have longitude grid labels that are incorrect by 180° . Obvious terrestrial features can be used to obtain the correct grid orientation.

1.5 The Infrared Temperature Profile Radiometer (ITPR) Experiment

The ITPR instrument only operated in the nadir mode during this period. Sensor outputs from all seven channels have been normal. Instrument calibration values have remained almost constant during this period. Table 5-4 through 5-7 in Section 5 of this catalog give calibration values for previous catalog periods.

TABLE 1-3

ESMR COLOR IMAGES FROM LAUNCH
THROUGH 31 JANUARY 1974 AVAILABLE AT NSSDC

Projection: Polar Area: 60°N - 90°N	Projection: Polar Area: 60°S - 90°S	Projection: Mercator	
DATE	DATE	AREA	DATE
15 December 1972	15 December 1972	180°W - 180°E	12 Jan. 1973
24 December	24 December	60°S - 60°N	
2 January	11 January 1973	130°E - 110°W	13 Jan.
11 January	21 January	50°S - 50°N	
30 January	30 January	20°E - 40°E	13 Jan.
10 February	10 February	10°N - 40°N	
26 February	26 February	130°E - 110°W	14 Jan.
21 June	4 March	50°S - 50°N	
1 July	15 March	60°E - 150°E	14 Jan.
21 July	26 March	0° - 60°N	
30 July	4 June	20°W - 60°E	18 Jan.
8 September	21 June	0° - 75°N	
27 November	1 July	60°W -130°W	23 Jan.
8 December	11 July	10°N - 60°N	
	21 July	60°E - 150°E	10 Feb.
	30 July	0° - 60°N	
	30 August		
	5 September		
	28 September		
	27 November		
	8 December		

1.6 The Selective Chopper Radiometer (SCR) Experiment

1.6.1 Instrument Performance

The SCR instrument has remained in the normal operating mode since shortly after launch. Useful data continues to be received from all A, B, and C channels. The D channels, when in high gain, have been affected by noise since orbit 3124 (1 August). Since 21 September the data has been unusable. The problem is attributed to faulty relay contacts.

The SCR data is transmitted daily from Goddard Space Flight Center to the experimenter at Oxford, England. After processing and calibration, the data is output in several forms for analysis. Previous volumes of this catalog series show several output forms and provide discussion of some of the results from analysis of the SCR data.

1.7 The Nimbus E Microwave Spectrometer (NEMS) Experiment

The NEMS instrument continued to perform well during this catalog period. The experimenter at MIT, Cambridge, Massachusetts, continues to receive all NEMS data and is using it for research. Examples and analysis of some of the output products are in volume 1 through 3 of this catalog series.

1.8 Bibliography on Nimbus 5 for the First Year (December, 1972 through January, 1973

1.8.1 ESMR

Campbell, W. J., Gloersen, P., Nordberg, W., and Wilheit, T. T.: Dynamics and Morphology of Beaufort Sea Ice Determination From Satellites, Aircraft, and Drifting Stations. Goddard Space Flight Center, NASA, X-650-73-194, June, 1973

Gloersen, P., Chang, T.C., Wilheit, T. T., and Campbell, W. J.: Polar Sea Ice Observations by Means of Microwave Radiometry. Goddard Space Flight Center, NASA, X-652-73-341, November, 1973

Gloersen, P., Wilheit, T. T., Chang, T. C., Nordberg, W., and Campbell, W. J.: Microwave Maps of the Polar Ice of the Earth. Goddard Space Flight Center, NASA, X-652-73-269, August, 1973

Sabatini, R. R. and Merritt, E. S.: The Nimbus 5 ESMR and its Application to Storm Detection. Final Report EPRF 51-0873-004, Earth Satellite Corporation, Washington, D. C., July, 1973

Schmugge, T. J., Rango, A., Allison, L. J., and Wilheit, T. T.: Hydrologic Applications of Nimbus 5 ESMR Data. Goddard Space Flight Center, NASA X-910-74-51, February, 1974

Wilheit, T., Theon, J., Shenk, W., and Allison, L.: Meteorological Interpretations of the Images from Nimbus 5 Electrically Scanning Microwave Radiometer. Goddard Space Flight Center, NASA, X-651-73-189, June, 1973

1.8.2 ITPR

Smith, W. L., Hilleary, D. T., Fischer, J. C., Howell, H. B., and Woolf, H. M.: The Nimbus-5 ITPR Experiment. Applied Optics, Vol. 13, January, 1974, pp. 499-506

Smith, W. L., Woolf, H. M., and Hayden, C. M.: Extraction of Meteorological Data from the Nimbus-5 ITPR Experiment. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973

1.8.3 SCR

Barnett, J. J.: Analysis of Stratospheric Measurements by the Nimbus IV and V Selective Chopper Radiometers. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973

Barnett, J. J., Houghton, J. T., Morgan C. G., Pick, D. R., Rodgers, C. D., Williamson, E. J., Cross, M. J., Flower, D., Peckham, G., and Smith, S. D.: Stratospheric Observations from Nimbus 5. Nature, Vol. 245, 1973, pp. 141-143

Ellis, P., Holah, G., Houghton, J. T., Jones, T. S., Peckham, G., Peskett, G. D., Pick, D. R., Rodgers, C. D., Roscoe, H., Sandwell, R., Smith, S. D., and Williamson, E. J.: Remote Sounding of Atmospheric Temperature from Satellites IV. The Selective Chopper Radiometer from Nimbus 5. Proc. R. Soc. Lond., Vol. 334, 1973, pp. 149-170

Jones, T. S. and Williamson, E. J.: The Analysis of Data from Meteorological Satellites. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973

Pick, D. R.: The Scientific Assessment of the Selective Chopper Radiometer Flown on the Nimbus 5 Satellite. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973

1.8.4 NEMS

Poon, R. K. L. and Staelin, D. H.: Anomalous Oxygen Absorption Inferred From Nimbus-5 Microwave Experiment, Quarterly Progress Report No. 111, Research Laboratory of Electronics, M.I.T., Cambridge, Mass., October 15, 1973, pp. 9-44

Staelin, D. H., Barath, F. T., Barrett, A. H., Gaut, N. E., Kunzi, K. F., Lenoir, W. B., Nordberg, W., Pettyjohn, R. L., Poon, R. K. L., Waters, J. W., Wilcox,

R. W.: Preliminary Results from the Nimbus-5 Microwave Spectrometer Experiment. Quarterly Progress Report No. 109, Research Laboratory of Electronics, M.I.T., Cambridge, Mass., April 15, 1973, pp. 6-10

Satelin, D. H., Barrett, A. H., Kunzi, K. F., Lenoir, W. B., Pettyjohn, R. L., Poon, R. K. L., Waters, J. W., Barath, F. T., Blinn, J. C., Johnston, E. J., Rosenkranz, P. W., Gaut, N. E., and Nordberg, W.: Meteorological Measurements From Space with Passive Microwave Techniques. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973, pp. 201-206

Satelin, D. H., Kunzi, K. F., Pettyjohn, R. L., Poon, R. K. L., Smith, W. L., Waters, J. W., Wilcox, R. W.: Further Results from the Nimbus-5 Microwave Spectrometer Experiment. Quarterly Progress Report No. 110, Research Laboratory of Electronics, M.I.T., Cambridge, Mass., July 15, 1973, pp. 7-10

Staelin, D. H., Barrett, A. H., Waters, J. W., Barath, F. T., Johnston, E. J., Rosenkranz, P. W., Gaut, N. E., and Lenoir, W. B.: Microwave Spectrometer on the Nimbus-5 Satellite: Meteorological and Geophysical Data. Science, Vol. 182, pp. 1339-1341

1.8.5 NEMS, ITPR, and SCR

Smith, W. L., Staelin, D.H., and Houghton, J. T.: Vertical Temperature Profiles from Satellites - Results from Second Generation Instruments Aboard Nimbus-5. Proceedings, COSPAR Symposium on Approaches to Earth Survey Problems Through the Use of Space Techniques, IUGG, LAMAP, Konstanz, Federal Republic of Germany, May 23 - June 6, 1973

Smith, W. L., Staelin, D. H., and Houghton, J. T.: Intercomparison and Amalgamation of Nimbus-5 Infrared and Microwave Temperature Profile Data. Proceedings, Les Satellites Meteorologiques, The International Symposium on Meteorological Satellites, Paris, France, May 21-24, 1973, pp. 139-145

1.8.6 ESMR and THIR

Allison, L. J., Rodgers, E. B., Wilheit, T. T., and Wexler, R.: A Multi-sensor Analysis of Nimbus 5 Data on 22 January 1973. Goddard Space Flight Center, NASA, X-910-74-20, January, 1974

1.8.7 THIR, ESMR, and SCMR

Theon, J. S.: A Multispectral View of the Gulf of Mexico from Nimbus 5. Bulletin of the American Meteorological Society, Vol. 54, September, 1973, pp. 934-937

SECTION 2

THE ORBITAL ELEMENTS AND DATA AVAILABILITY ON-OFF TIMES

The Nimbus 5 Brouwer Mean orbital elements for selected epochs during December 1973 and January 1974 are listed in Table 2-1.

Table 2 - 1

Nimbus 5 Brouwer Mean Orbital Elements
For December 1973 and January 1974

Epoch	Universal Time	9 Dec. 73 00 00 00	23 Dec. 73 00 00 00	6 Jan. 74 00 00 00	21 Jan. 74 00 00 00
Semi-Major Axis	Km	7473.524	7473.521	7473.519	7473.516
Eccentricity		.000892	.000879	.000853	.000819
Inclination	Degrees	99.935	99.934	99.935	99.934
Argument of Perigee	Degrees	78.230	45.211	11.743	335.065
Right Ascension of Ascending Node	Degrees	249.777	263.765	277.553	292.325
Height of Perigee	Km	1088.69	1088.79	1088.98	1089.23
Height of Apogee	Km	1102.02	1101.92	1101.73	1101.47
Anomalistic Period	Minutes	107.1632	107.1631	107.1631	107.1630
Motion of Perigee	Deg. Per Day	-2.4347	-2.4348	-2.4348	-2.4348

The data availability on-off times (Table 2-2) list the times when the data from each instrument was recorded on a HDRSS.

THIR orbital coverage in Table 2-2 is divided between daytime and nighttime data. The THIR data is normally recorded simultaneously from both 6.7 μm and 11.5 μm channels. Therefore, the listed on-off times apply to both channels.

A THIR data orbit is defined as beginning and ending at the night-day terminator. Thus, the daytime data orbit extends from the night-day terminator to the day-night

terminator. Each daytime THIR data orbit is assigned the orbit number of the ascending node which occurs during that portion of the orbit. The same orbit number is assigned also to the succeeding nighttime data orbit.

The "INT ORBIT & STDN" identify the orbit and the ground station to which the satellite data is transmitted. The letter "R" denotes Rosman, North Carolina; the letter "A" denotes Fairbanks, Alaska.

The "HDRSS" identifies the satellite tape recorder, either A or B.

The "THIR GRID CORR" columns are used to indicate an image grid error in latitude and longitude whenever either is in error by more than one degree of great circle arc (60 n. m.). Latitude errors are suffixed by an N or S; longitude errors, by an E or W. An N or S indicates the grid should be moved up or down by the amount shown to obtain a good fit of the grid to the geography. An E or W indicates the grid should be moved right or left, at the equator, by the amount shown.

Ascending node times and longitudes are the times and longitudes at which the satellite crosses the equator in the northbound direction. These crossings always occur during the daytime portion of the orbit. The descending nodes and times refer to the southbound crossings, which occur during the nighttime portion of the orbit.

ESMR, NEMS, SCR, and ITPR are normally on all the time. Their sensory information is recorded on a HDRSS between interrogations, and their on- and off-times define the total record times between interrogations. An interrogation orbit is the orbit during which previously recorded data is transmitted to a ground station. This data will be from segments of two or more data orbits. To determine the orbital coverage of the data from any interrogation, the on- and off-times should be matched with the appropriate ascending or descending node listed with the THIR information on the same page of Table 2-2. Coverage can then be determined as described below.

The "DATA ORBIT" indicator in the ESMR table is given only for reference purposes. It is the number which appears on the data display image, samples of which are reproduced in Section 3, and identifies the last data orbit on each display. It should not be confused with the THIR data orbit number.

Table 2-2 together with the World Map (Figure 2-1) and the vellum Subsatellite Tracks Overlay attached to the back of this catalog, can be used to determine approximate geographic coverages.

A Subsatellite Tracks Overlay is correctly oriented with the World Map when the ascending or descending node line on the overlay coincides with the 0-degree latitude (equator) line of the World Map. Orbital coverage is determined by placing an orbit track on the world map at the appropriate ascending node (for daytime) or descending node (for nighttime) longitude for the orbit of interest.

The Subsatellite Tracks Overlay contains 14 correctly spaced tracks, which end at the approximate earth day-night transitions. The tracks contain time ticks

spaced 5 minutes apart, appropriately annotated at the edge of the overlay, referenced from the equator. Times in minutes from equator crossings for all or part of a particular orbit are calculated by adding or subtracting from the ascending or descending node time listed for that orbit in the Data Availability On-Off Times Table.

The nature and format of the data to be available from each experiment are explained in detail in the respective sections of The Nimbus 5 User's Guide. The appropriate sources for requesting the various data types are listed in Section 1.7 of the same manual.

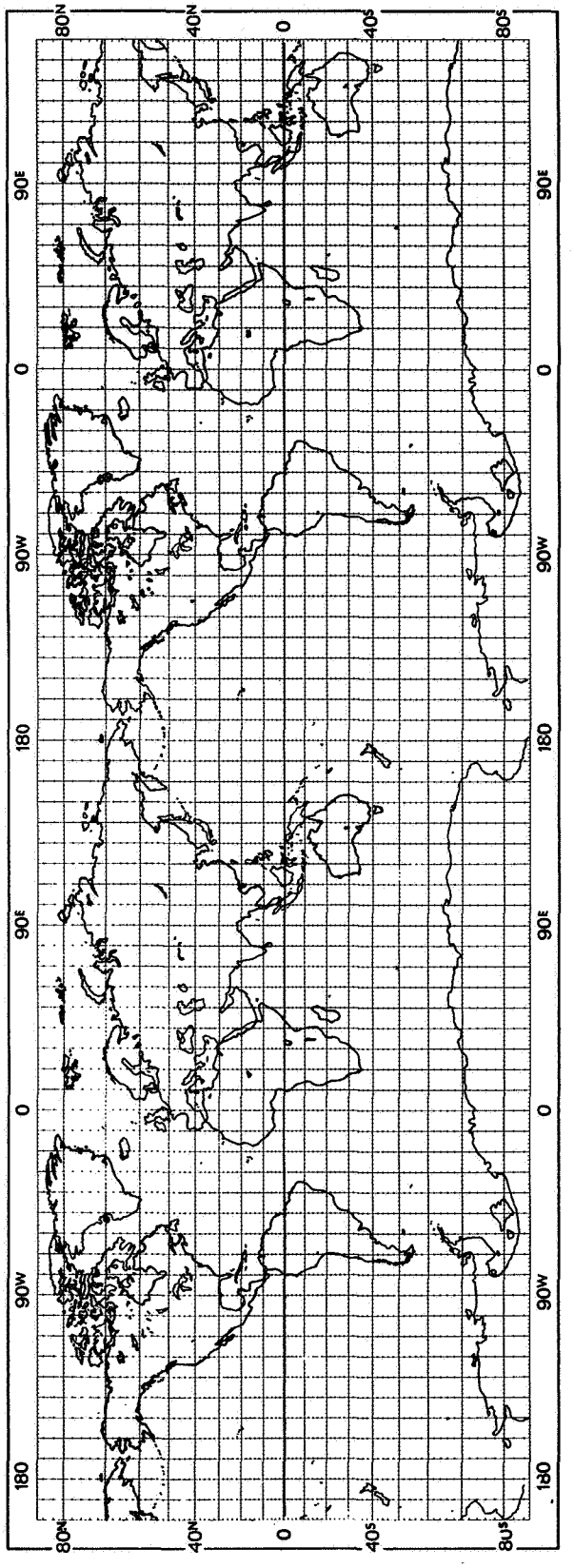


Figure 2-1 World Map

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
1 DECEMBER 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4762	0046	0135	4764R	A		011743	E153.0	4762	0003	0157	4764R	A
4763	0233	0322	4763R	B		030459	E126.2	4763	0149	0346	4763R	B
4764	0421	0509	4764R	B		045216	E099.3	4764	0352	0529	4764R	B
4765	0608	0656	4765R	B		063932	E072.5	4765	0541	0717	4765R	B
4766	0755	0844	4766A	B		082649	E045.7	4766	0722	0900	4766A	B
4767	0943	1031	4767A	B		101405	E018.9	4767	0905	1047	4767A	B
4768	1130	1218	4768A	B		120121	W007.9	4768	1051	1232	4768A	B
4769	1317	1406	4769A	B		134838	W034.8	4769	1237	1417	4769A	B
4770	1504	1553	4770A	B		153554	W061.6	4770	1422	1558	4770A	B
4771	1652	1740	4771A	B		172311	W088.4	4771	1603	1742	4771A	B
4772	1839	1927	4772A	B		191027	W115.2	4772	1747	1928	4772A	B
4773	2026	2113	4773A	B		205744	W142.0	4773	1932	2114	4773A	B
4774	2213	2300	4774A	B		224500	W168.9	4774	2119	2300	4774A	B
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
4762	0135	0157	4764R	A		021113	W040.4		0003	0157	4764R	A
4762	0149	0233	4763R	B					0149	0346	4763R	B
4763	0322	0346	4763R	B		035829	W067.2		0352	0529	4764R	B
4763	0352	0421	4764R	B					0541	0717	4765R	B
4764	0509	0529	4764R	B		054546	W094.0		0722	0901	4766A	B
4764	0540	0608	4765R	B					0905	1047	4767A	B
4765	0656	0716	4765R	B		073302	W120.9		1051	1233	4768A	B
4765	0722	0755	4766A	B					1238	1417	4769A	B
4766	0844	0859	4766A	B		092019	W147.7		1422	1558	4770A	B
4766	0905	0943	4767A	B					1603	1742	4771A	B
4767	1031	1046	4767A	B		110735	W174.5		1746	1927	4772A	B
4767	1052	1130	4768A	B					1932	2114	4773A	B
4768	1218	1231	4768A	B		125452	E158.7		2119	2301	4774A	B
4768	1238	1317	4769A	B								
4769	1406	1416	4769A	B		144208	E131.9					
4769	1422	1504	4770A	B								
4770	1603	1652	4771A	B		162925	E105.1					
4771	1747	1839	4772A	B		181641	E078.2					
4772	1933	2026	4773A	B		200358	E051.4					
4773	2119	2213	4774A	B		215114	E024.6					
4774						233831	W002.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
2 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4775						003217	E164.3	4776	0104	0255	4777R	A
4776	0148	0236	4777R	A		021933	E137.5	4777	0251	0444	4777R	B
4777	0335	0424	4777R	B		040650	E110.7	4778	0450	0634	4778R	B
4778	0523	0611	4778R	B		055406	E083.9	4779	0639	0814	4779A	B
4779	0710	0758	4779A	B		074123	E057.1	4780	0819	0959	4780A	B
4780	0857	0946	4780A	B		092839	E030.2	4781	1004	1148	4781A	B
4781	1044	1133	4781A	B		111556	E003.4	4782	1153	1331	4782A	B
4782	1232	1320	4782A	B		130312	W023.4	4783	1335	1515	4783A	B
4783	1419	1507	4783A	B		145029	W050.2	4784	1521	1701	4784A	B
4784	1606	1655	4784A	B		163745	W077.0	4785	1706	1837	4785A	B
4785	1753	1839	4785A	B		182502	W103.9	4786	1846	2028	4786A	B
4786	1941	2027	4786A	B		201218	W130.7	4787	2033	2215	4787A	B
4787	2128	2214	4787A	B		215935	W157.5	4788	2218	0016	4791R	A
4788	2315	0004	4791R	A		234651	E175.7					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
4775	0104	0148	4777R	A		012547	W029.1		0103	0255	4777R	A
4776	0236	0255	4777R	A		031304	W055.9		0250	0444	4777R	B
4776	0251	0335	4777R	B					0449	0634	4778R	B
4777	0424	0443	4777R	B		050020	W082.7		0639	0814	4779A	B
4777	0449	0523	4778R	B					0819	0959	4780A	B
4778	0611	0632	4778R	B		064737	W109.5		1004	1148	4781A	B
4778	0639	0710	4779A	B					1153	1330	4782A	B
4779	0758	0813	4779A	B		083453	W136.3		1335	1515	4783A	B
4779	0819	0857	4780A	B					1521	1701	4784A	B
4780	0946	0958	4780A	B		102210	W163.1		1706	1837	4785A	B
4780	1004	1044	4781A	B					1845	2028	4786A	B
4781	1133	1147	4781A	B		120926	E170.0		2033	2215	4787A	B
4781	1155	1232	4782A	B					2218	0016	4791R	A
4782	1320	1325	4782A	B		135643	E143.2					
4782	1335	1419	4783A	B								
4783	1507	1515	4783A	B		154359	E116.4					
4783	1521	1606	4784A	B								
4784	1655	1701	4784A	B		173116	E089.6					
4784	1706	1753	4785A	B								
4785	1846	1941	4786A	B		191832	E062.8					
4786	2033	2128	4787A	B		210549	E036.0					
4787	2218	2315	4791R	A		225305	E009.1					
4788	0004	0015	4791R	A		004022	W017.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
3 DECEMBER 1973

THIR							ASC. AND DESC. NODE		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR						ASC. NODE						
4789							013408	E148.9	4790	0205	0402	4790R	B
4790	0250	0338	4790R	B			032124	E122.1	4791	0407	0546	4791R	B
4791	0437	0526	4791R	B			050841	E095.2	4792	0551	0727	4792A	B
4792	0624	0713	4792A	B			065557	E068.4	4793	0731	0914	4793A	B
4793	0812	0900	4793A	B			084314	E041.6	4794	0919	1103	4794A	B
4794	0959	1047	4794A	B			103030	E014.8	4795	1109	1247	4795A	B
4795	1146	1235	4795A	B			121747	W012.0	4796	1252	1431	4796A	B
4796	1333	1422	4796A	B			140503	W038.9	4797	1435	1617	4797A	B
4797	1521	1609	4797A	B			155220	W065.7	4798	1622	1802	4798A	B
4798	1708	1756	4798A	B			173936	W092.5	4799	1807	1945	4799A	B
4799	1855	1944	4799A	B			192653	W119.3	4800	1950	2134	4800A	B
4800	2042	2131	4800A	B			211410	W146.1					
4801							230126	W173.0					
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
4789	0205	0250	4790R	B			022738	W044.5		0205	0402	4790R	B
4790	0338	0401	4790R	B			041455	W071.3		0407	0546	4791R	B
4790	0408	0437	4791R	B						0551	0727	4792A	B
4791	0526	0545	4791R	B			060211	W098.2		0731	0914	4793A	B
4791	0551	0624	4792A	B						0919	1103	4794A	B
4792	0713	0726	4792A	B			074928	W125.0		1109	1247	4795A	B
4792	0732	0812	4793A	B						1251	1431	4796A	B
4793	0900	0913	4793A	B			093644	W151.8		1435	1617	4797A	B
4793	0919	0959	4794A	B						1622	1802	4798A	B
4794	1047	1103	4794A	B			112401	W178.6		1807	1945	4799A	B
4794	1109	1146	4795A	B						1950	2134	4800A	B
4795	1235	1242	4795A	B			131117	E154.6					
4795	1251	1333	4796A	B									
4796	1422	1430	4796A	B			145834	E127.8					
4796	1436	1521	4797A	B									
4797	1609	1616	4797A	B			164550	E100.9					
4797	1622	1708	4798A	B									
4798	1756	1801	4798A	B			183307	E074.1					
4798	1807	1855	4799A	B									
4799	1950	2042	4800A	B			202023	E047.3					
4800							220740	E020.5					
4801							235456	W006.3					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
4 DECEMBER 1973

THIR							ASC. AND		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO		DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR						ASC. NODE						
4802							004842	E160.2	4803	0120	0310	4804R	A
4803	0204	0253	4804R	A			023559	E133.4	4804	0307	0501	4804R	B
4804	0352	0440	4804R	B			042315	E106.6	4805	0507	0648	4805R	B
4805	0539	0627	4805R	B			061032	E079.8	4806	0653	0828	4806A	B
4806	0726	0815	4806A	B			075748	E053.0	4807	0832	1018	4807A	B
4807	0913	1002	4807A	B			094505	E026.1	4808	1022	1159	4808A	B
4808	1101	1149	4808A	B			113221	W000.7	4809	1205	1345	4809A	B
4809	1248	1336	4809A	B			131937	W027.5	4810	1350	1529	4810A	B
4810	1435	1524	4810A	B			150654	W054.3	4811	1534	1714	4811A	B
4811	1622	1711	4811A	B			165410	W081.2	4812	1719	1859	4812A	B
4812	1810	1858	4812A	B			184127	W108.0	4813	1903	2046	4813A	B
4813	1957	2045	4813A	B			202843	W134.8	4814	2052	2235	4814A	B
4814	2144	2233	4814A	B			221600	W161.6					
	NIGHTTIME THIR						DESC. NODE			NEMS - SCR - ITPR			
4802	0120	0204	4804R	A			014213	W033.2		0119	0310	4804R	A
4803	0253	0310	4804R	A			032929	W060.0		0307	0501	4804R	B
4803	0308	0352	4804R	B						0506	0648	4805R	B
4804	0440	0500	4804R	B			051645	W086.8		0653	0829	4806A	B
4804	0507	0539	4805R	B						0833	1018	4807A	B
4805	0627	0647	4805R	B			070402	W113.6		1023	1159	4808A	B
4805	0653	0726	4806A	B						1204	1345	4809A	B
4806	0815	0828	4806A	B			085118	W140.4		1350	1529	4810A	B
4806	0833	0913	4807A	B						1534	1715	4811A	B
4807	1002	1017	4807A	B			103835	W167.3		1719	1858	4812A	B
4807	1023	1101	4808A	B						1903	2046	4813A	B
4808	1149	1159	4808A	B			122551	E165.9		2051	2235	4814A	B
4808	1204	1248	4809A	B									
4809	1336	1344	4809A	B			141308	E139.1					
4809	1350	1435	4810A	B									
4810	1534	1622	4811A	B			160024	E112.3					
4811	1720	1810	4812A	B			174741	E085.5					
4812	1903	1957	4813A	B			193457	E058.7					
4813	2051	2144	4814A	B			212214	E031.8					
4814	2234	2332	4818A	A			230930	E005.0					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
5 DECEMBER 1973

THIR							ASC. AND		ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR		DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR						ASC. NODE						
4815	2332	0020	4818A	A			000316	E171.6	4815	2234	0033	4818R	A
4816							015033	E144.8	4817	0222	0416	4817R	B
4817	0306	0355	4817A	B			033749	E117.9	4818	0424	0602	4818R	B
4818	0453	0542	4818A	B			052506	E091.1	4819	0608	0745	4819A	B
4819	0641	0729	4819A	B			071222	E064.3	4820	0750	0931	4820A	B
4820	0828	0916	4820A	B			085939	E037.5	4821	0936	1120	4821A	B
4821	1015	1104	4821A	B			104655	E010.7	4822	1124	1305	4822A	B
4822	1202	1251	4822A	B			123412	W016.2	4823	1310	1446	4823A	B
4823	1350	1438	4823A	B			142128	W043.0	4824	1451	1629	4824A	B
4824	1537	1626	4824A	B			160845	W069.8	4825	1634	1813	4825A	B
4825	1724	1812	4825A	B			175601	W096.6	4826	1819	2000	4826A	B
4826	1912	1959	4826A	B			194318	W123.4	4827	2005	2145	4827A	B
4827	2059	2145	4827A	B			213034	W150.3					
4828							231751	W177.1					
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
4815	0020	0033	4818A	A			005647	W021.8	2234	0034	4818R	B	
4816	0222	0306	4817A	B			024403	W048.6	0222	0417	4817R	B	
4817	0355	0416	4817A	B			043120	W075.4	0423	0602	4818R	A	
4817	0424	0453	4818A	B					0608	0745	4819A	B	
4818	0542	0602	4818A	B			061836	W102.3	0750	0931	4820A	B	
4818	0608	0641	4819A	B					0936	1119	4821A	B	
4819	0729	0744	4819A	B			080553	W129.1	1124	1305	4822A	B	
4919	0750	0828	4820A	B					1310	1446	4823A	B	
4820	0916	0930	4820A	B			095309	W155.9	1451	1629	4824A	B	
4820	0936	1015	4821A	B					1635	1813	4825A	B	
4821	1104	1119	4821A	B			114026	E177.3	1819	2000	4826A	B	
4821	1125	1202	4822A	B					2005	2146	4827A	B	
4822	1251	1304	4822A	B			132742	E150.5					
4822	1310	1350	4823A	B									
4823	1438	1445	4823A	B			151459	E123.7					
4823	1451	1537	4824A	B									
4824	1635	1724	4825A	B			170215	E096.8					
4825	1819	1912	4826A	B			184932	E070.0					
4826	2005	2059	4827A	B			203648	E043.2					
4827							222405	E016.4					
4828							001121	W010.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
6 DECEMBER 1973

THIR							ASC. AND DESC. NODE		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
4829						010507	E156.1	4830	0138	0324	4831R	A
4830	0221	0309	4831R	A		025224	E129.3	4832	0523	0704	4832R	B
4831	0408	0456	4831R	B		043940	E102.5	4833	0710	0845	4833A	B
4932	0555	0644	4832R	B		062657	E075.7	4834	0851	1034	4834A	B
4833	0742	0831	4833A	B		081413	E048.9	4835	1038	1221	4835A	B
4834	0930	1018	4834A	B		100130	E022.0	4836	1226	1402	4836A	B
4835	1117	1206	4835A	B		114846	W004.8	4837	1406	1546	4837A	B
4836	1304	1353	4836A	B		133603	W031.6	4838	1551	1730	4838A	B
4837	1452	1540	4837A	B		152319	W058.4	4839	1734	1914	4839A	B
4838	1639	1727	4838A	B		171036	W085.3	4840	1919	2101	4840A	B
4839	1826	1913	4839A	B		185752	W112.1	4841	2105	2251	4841A	B
4840	2013	2100	4840A	B		204509	W138.9					
4841	2201	2249	4841A	B		223225	W165.7					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
4829	0139	0221	4831R	A		015838	W037.3	0138	0324	4831R	A	
4830	0309	0324	4831R	A		034554	W064.1	0523	0704	4832R	B	
4830	0325	0408	4831R	B				0710	0845	4833A	B	
4831	0456	0517	4831R	B		053311	W090.9	0851	1033	4834A	B	
4831	0523	0555	4832R	B				1038	1221	4835A	B	
4832	0644	0705	4832R	B		072027	W117.7	1226	1402	4836A	B	
4832	0710	0742	4833A	B				1406	1546	4837A	B	
4833	0831	0845	3833A	B		090744	W144.5	1551	1729	4838A	B	
4833	0851	0930	4834A	B				1734	1914	4839A	B	
4834	1018	1032	4834A	B		105500	W171.3	1919	2101	4840A	B	
4834	1038	1117	4835A	B				2105	2251	4841A	B	
4835	1206	1220	4835A	B		124217	E161.8					
4835	1226	1304	4836A	B								
4836	1353	1401	4836A	B		142933	E135.0					
4836	1406	1452	4837A	B								
4837	1551	1639	4838A	B		161650	E108.2					
4838	1734	1826	4839A	B		180406	E081.4					
4839	1919	2013	4840A	B		195123	E054.6					
4840	2106	2201	4841A	B		213839	E027.7					
4841	2252	2348	4844R	A		232556	E000.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
7 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4842	2348	0036	4844R	A		001942	E167.5	4842	2251	0050	4844R	A
4843						020658	E140.7	4844	0238	0431	4844R	B
4844	0322	0411	4844R	B		035415	E113.8	4845	0438	0620	4845R	B
4845	0510	0558	4845R	B		054131	E087.0	4846	0626	0802	4846A	B
4846	0657	0746	4846A	B		072848	E060.2	4847	0808	0947	4847A	B
4847	0844	0933	4847A	B		091604	E033.4	4848	0952	1130	4848A	B
4848	1032	1120	4848A	B		110321	E006.6	4849	1136	1318	4849A	B
4849	1219	1307	4849A	B		125037	W020.3	4850	1324	1501	4850A	B
4850	1406	1455	4850A	B		143753	W047.1	4851	1506	1645	4851A	B
4851	1553	1642	4851A	B		162510	W073.9	4852	1650	1828	4852A	B
4852	1741	1827	4852A	B		181226	W100.7	4853	1834	2016	4853A	B
4853	1928	2016	4853A	B		195943	W127.5	4854	2022	2201	4854A	B
4854	2115	2201	4854A	B		214659	W154.3					
4855						233416	E178.8					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
4842	0036	0050	4844R	A		011312	W025.9		2251	0050	4844R	A
4843	0238	0322	4844R	B		030029	W052.7		0237	0431	4844R	B
4844	0411	0431	4844R	B		044745	W079.5		0437	0621	4845R	B
4844	0437	0510	4845R	B					0626	0803	4846A	B
4845	0558	0620	4845R	B		063502	W106.4		0808	0948	4847A	B
4845	0626	0657	4846A	B					0953	1131	4848A	B
4846	0746	0802	4846A	B		082218	W133.2		1136	1319	4849A	B
4846	0808	0844	4847A	B					1324	1502	4850A	B
4847	0933	0947	4847A	B		100935	W160.0		1503	1646	4851A	B
4847	0952	1032	4848A	B					1651	1829	4852A	B
4848	1120	1130	4848A	B		115651	E173.2		1833	2017	4853A	B
4848	1136	1219	4849A	B					2022	2202	4854A	B
4849	1307	1318	4849A	B		134407	E146.4					
4849	1324	1406	4850A	B								
4850	1455	1501	4850A	B		153124	E119.6					
4850	1507	1553	4851A	B								
4851	1651	1741	4852A	B		171840	E092.7					
4852	1833	1928	4853A	B		190557	E065.9					
4853	2022	2115	4854A	B		205313	E039.1					
4854						224030	E012.3					
4855	0007	0050	4858R	A		002746	W014.5					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
8 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4856	0050	0138	4858R	A		012132	E152.0	4856	0007	0201	4858R	A
4857	0237	0325	4857R	B		030849	E125.2	4857	0152	0345	4857R	B
4858	0424	0513	4858R	B		045605	E098.4	4858	0354	0533	4858R	B
4859	0612	0700	4859A	B		064322	E071.6	4859	0539	0717	4859A	B
4860	0759	0847	4860A	B		083038	E044.7	4860	0722	0903	4860A	B
4861	0946	1035	4861A	B		101755	E017.9	4861	0908	1050	4861A	B
4862	1133	1222	4862A	B		120511	W008.9	4862	1054	1232	4862A	B
4863	1321	1409	4863A	B		135228	W035.7	4863	1237	1416	4863A	B
4864	1508	1556	4864A	B		153944	W062.5	4864	1421	1602	4864A	B
4865	1655	1744	4865A	B		172701	W089.4	4866	1749	1929	4866A	B
4866	1842	1927	4866A	B		191417	W116.2	4867	1934	2117	4867A	B
4867	2030	2116	4867A	B		210134	W143.0	4868	2123	2307	4868A	B
4868	2217	2305	4868A	B		224850	W169.8					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
4856	0138	0201	4858R	A		021503	W041.4		0007	0201	4858R	A
4856	0152	0237	4857R	B					0153	0346	4857R	B
4857	0325	0348	4857R	B		040219	W068.2		0354	0534	4858R	B
4857	0355	0424	4857R	B					0539	0717	4859A	B
4858	0513	0534	4858R	B		054936	W095.0		0722	0903	4860A	B
4858	0539	0612	4859A	B					0908	1050	4861A	B
4859	0700	0716	4859A	B		073652	W121.8		1054	1232	4862A	B
4859	0722	0759	4860A	B					1236	1416	4863A	B
4860	0847	0902	4860A	B		092409	W148.6		1421	1602	4864A	B
4860	0908	0946	4861A	B					1607	1745	4865A	B
4861	1035	1049	4861A	B		111125	W175.5		1750	1928	4866A	B
4861	1054	1133	4862A	B					1933	2117	4867A	B
4862	1222	1231	4862A	B		125842	E157.7		2122	2307	4868A	B
4862	1236	1321	4863A	B								
4863	1409	1416	4863A	B		144558	E130.9					
4863	1421	1508	4864A	B								
4864	1556	1602	4864A	B		163315	E104.1					
4864	1607	1655	4865									
4865	1750	1842	4866A	B		182031	E077.3					
4866	1933	2030	4867A	B		200748	E050.5					
4867	2123	2217	4868A	B		215504	E023.6					
4868	2308	0004	4871R	A		234221	W003.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
9 DECEMBER 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALD	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
4869	0004	0053	4871R	A		003607	E163.4	4869	2308	0106	4871R	A
4870						022323	E136.6	4871	0254	0448	4871R	B
4871	0339	0427	4871R	B		041040	E109.7	4872	0454	0637	4872R	B
4872	0526	0615	4872R	B		055756	E082.9	4873	0642	0818	4873A	B
4873	0713	0802	4873A	B		074513	E059.1	4874	0822	1003	4874A	B
4874	0901	0949	4874A	B		093229	E029.3	4875	1008	1148	4875A	B
4875	1048	1136	4875A	B		111946	E002.5	4876	1152	1335	4876A	B
4876	1235	1324	4876A	B		130702	W024.4	4877	1339	1519	4877A	B
4877	1422	1511	4877A	B		145419	W051.2	4878	1524	1704	4878A	B
4878	1610	1658	4878A	B		164135	W078.0	4879	1709	1846	4879A	B
4879	1757	1845	4879A	B		182852	W104.8	4880	1850	2032	4880A	B
4880	1944	2031	4880A	B		201608	W131.6	4881	2037	2222	4881A	B
4881	2132	2220	4881A	B		220325	W158.5					
4882						235041	E174.7					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
4869	0053	0105	4871R	A		012937	W030.0		2307	0106	4871R	B
4870	0254	0339	4871R	B		031654	W056.8		0254	0447	4871R	A
4871	0427	0443	4871R	B		050410	W083.6		0453	0637	4872R	B
4871	0453	0526	4872R	B					0642	0817	4873A	B
4872	0615	0636	4872R	B		065127	W110.5		0822	1003	4874A	B
4872	0642	0713	4873A	B					1008	1147	4875A	B
4873	0802	0816	4873A	B		083843	W137.3		1152	1334	4876A	B
4873	0822	0901	4874A	B					1339	1519	4877A	B
4874	0949	1002	4874A	B		102600	W164.1		1524	1704	4878A	B
4874	1008	1048	4875A	B					1709	1846	4879A	B
4875	1136	1147	4875A	B		121316	E169.1		1850	2032	4880A	B
4875	1152	1235	4876A	B					2037	2222	4881A	B
4876	1324	1334	4876A	B		140033	E142.3					
4876	1339	1422	4877A	B								
4877	1511	1518	4877A	B		154749	E115.5					
4877	1524	1610	4878A	B								
4878	1658	1703	4878A	B		173506	E088.6					
4878	1709	1757	4879A	B								
4879	1850	1944	4880A	B		192222	E061.8					
4880	2037	2132	4881A	B		210939	E035.0					
4881						225655	E008.2					
4882	0023	0106	4884R	A		004412	W018.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
10 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4883	0106	0155	4884R	A		013758	E147.9	4883	0023	0214	4884R	A
4884	0253	0342	4884R	B		032514	E121.1	4884	0208	0406	4884R	B
4885						051231	E094.3	4886	0555	0735	4887A	A
4886	0628	0716	4887A	A		065947	E067.5	4887	0752	0916	4887A	B
4887	0815	0904	4887A	B		084703	E040.6	4888	0921	1103	4888A	B
4888	1002	1051	4888A	B		103420	E013.8	4889	1108	1248	4889A	B
4889	1150	1238	4889A	B		122136	W013.0	4890	1253	1434	4890A	B
4890	1337	1425	4890A	B		140853	W039.8	4891	1438	1618	4891A	B
4891	1524	1613	4891A	B		155609	W066.6	4892	1623	1803	4892A	B
4892	1712	1800	4892A	B		174326	W093.5	4893	1808	1945	4893A	B
4893	1859	1945	4893A	B		193042	W120.3	4894	1951	2137	4894A	B
4894	2046	2135	4894A	B		211759	W147.1	4895	2142	2321	4895A	B
4895	2233	2321	4895A	B		230515	W173.9					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
4883	0155	0214	4884R	A		023128	W045.5		0023	0214	4884R	A
4883	0208	0253	4884R	B					0209	0406	4884R	B
4884	0342	0406	4884R	B		041845	W072.3		0535	0735	4887A	A
4885	0536	0628	4887A	A		060601	W099.1		0734	0917	4887A	B
4886	0716	0734	4887A	A		075318	W125.9		0921	1103	4888A	B
4886	0734	0815	4887A	B					1108	1248	4889A	B
4887	0904	0916	4887A	B		094034	W152.8		1253	1433	4890A	B
4887	0921	1002	4888A	B					1438	1618	4891A	B
4888	1051	1102	4888A	B		112751	W179.6		1623	1803	4892A	B
4888	1108	1150	4889A	B					1808	1946	4893A	B
4889	1238	1247	4889A	B		131507	E153.6		1950	2138	4894A	B
4889	1253	1337	4890A	B					2142	2322	4895A	B
4990	1425	1432	4890A	B		150224	E126.8					
4890	1438	1524	4891A	B								
4891	1623	1712	4892A	B		164940	E100.0					
4892	1808	1859	4893A	B		183656	E073.2					
4893	1950	2046	4894A	B		202413	E046.3					
4894	2142	2233	4895A	B		221129	E019.5					
4895	2325	0021	4898R	A		235846	W007.3					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
11 DECEMBER 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4896	0021	0109	4898R	A		005232	E159.3	4896	2324	0126	4898R	A
4897						023948	E132.5	4898	0312	0504	4898R	B
4898	0355	0444	4898R	B		042705	E105.6	4899	0510	0710	4900A	B
4899	0542	0631	4900A	B		061421	E078.8	4900	0707	0835	4900A	A
4900	0730	0818	4900A	A		080138	E052.0	4901	0836	1018	4901A	B
4901	0917	1005	4901A	B		094854	E025.2	4902	1023	1204	4902A	B
4902	1104	1153	4902A	B		113611	W001.7	4903	1209	1350	4903A	B
4903	1252	1340	4903A	B		132327	W028.5	4904	1355	1534	4904A	B
4904	1439	1527	4904A	B		151044	W055.3	4905	1540	1720	4905A	B
4905	1626	1715	4905A	B		165800	W082.1	4906	1726	1859	4906A	B
4906	1813	1858	4906A	B		184517	W108.9	4907	1906	2048	4907A	B
4907	2001	2047	4907A	B		203233	W135.8	4908	2054	2235	4908A	B
4908	2148	2234	4908A	B		221950	W162.6					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
4896	0109	0126	4898R	A		014602	W034.1		2325	0127	4898R	A
4897	0312	0355	4898R	B		033319	W060.9		0311	0504	4898R	B
4898	0444	0503	4898R	B		052035	W087.8		0509	0710	4900A	B
4898	0509	0542	4900A	B					0707	0835	4900A	A
4899	0631	0709	4900A	B		070752	W114.6		0836	1019	4901A	B
4899	0708	0730	4900A	A					1023	1205	4902A	B
4900	0818	0835	4900A	A		085508	W141.4		1209	1350	4903A	B
4900	0836	0917	4901A	B					1355	1534	4904A	B
4901	1005	1018	4901A	B		104225	W168.2		1539	1721	4905A	B
4901	1023	1104	4902A	B					1726	1859	4906A	B
4902	1153	1204	4902A	B		122941	E165.0		1904	2049	4907A	B
4902	1209	1252	4903A	B					2054	2235	4908A	B
4903	1340	1349	4903A	B		141658	E138.2					
4903	1355	1439	4904A	B								
4904	1527	1533	4904A	B		160414	E111.3					
4904	1539	1626	4905A	B								
4905	1726	1813	4906A	B		175131	E084.5					
4906	1904	2001	4907A	B		193847	E057.7					
4907	2054	2148	4908A	B		212604	E030.9					
4908						231320	E004.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
12 DECEMBER 1973

THIR						ASC. AND		ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
DAYTIME THIR						**ASC. NODE**						
4909						000706	E170.6	4910	0038	0225	4911R	A
4910	0122	0211	4911R	A		015423	E143.8	4911	0225	0420	4911R	B
4911	0310	0358	4911R	B		034139	E117.0	4912	0426	0616	4913A	B
4912	0457	0545	4913A	B		052856	E090.2	4913	0606	0805	4914A	A
4913	0644	0733	4914A	A		071612	E063.4	4914	0754	0933	4914A	B
4914	0831	0920	4914A	B		090329	E036.5	4915	0938	1119	4915A	B
4915	1019	1107	4915A	B		105045	E009.7	4916	1124	1306	4916A	B
4916	1206	1255	4916A	B		123802	W017.1	4917	1311	1450	4917A	B
4917	1353	1442	4917A	B		142518	W043.9	4918	1454	1632	4918A	B
4918	1541	1629	4918A	B		161235	W070.8	4919	1637	1817	4919A	B
4919	1728	1816	4919A	B		175951	W097.6	4920	1822	2002	4920A	B
4920	1915	2002	4920A	B		194707	W124.4	4921	2007	2152	4921A	B
4921	2102	2151	4921A	B		213424	W151.2					
4922						232140	W178.0					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
4909	0039	0122	4911R	A		010037	W022.8	0039	0225	4911R	A	
4910	0211	0224	4911R	A		024753	W049.6	0225	0420	4911R	B	
4910	0225	0310	4911R	B				0426	0617	4913A	B	
4911	0358	0420	4911R	B		043510	W076.4	0606	0805	4914A	A	
4911	0426	0457	4913A	B				0754	0933	4914A	B	
4912	0545	0616	4913A	B		062226	W103.2	0938	1119	4915A	B	
4912	0605	0644	4914A	A				1124	1306	4916A	B	
4913	0733	0804	4914A	A		080943	W130.0	1311	1450	4917A	B	
4913	0753	0831	4914A	B				1455	1633	4918A	B	
4914	0920	0932	4914A	B		095659	W156.9	1637	1817	4919A	B	
4914	0938	1019	4915A	B				1823	2003	4920A	B	
4915	1107	1117	4915A	B		114416	E176.3	2007	2153	4921A	B	
4915	1124	1206	4916A	B								
4916	1255	1305	4916A	B		133132	E149.5					
4916	1311	1353	4917A	B								
4917	1442	1449	4917A	B		151849	E122.7					
4917	1455	1541	4918A	B								
4918	1637	1728	4919A	B		170605	E095.9					
4919	1823	1915	4920A	B		185322	E069.1					
4920	2007	2102	4921A	B		204038	E042.2					
4921						222755	E015.4					
4922						001511	W011.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
13 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4923						010857	E155.2	4924	0140	0333	4925R	A
4924	0224	0313	4925R	A		025613	E128.3	4925	0329	0521	4925R	B
4925	0411	0500	4925R	B		044330	E101.5	4926	0527	0710	4926R	B
4926	0559	0647	4926R	B		063046	E074.7	4927	0715	0850	4927A	B
4927	0746	0835	4927A	B		081803	E047.9	4928	0854	1036	4928A	B
4928	0933	1022	4928A	B		100519	E021.1	4929	1041	1223	4929A	B
4929	1121	1209	4929A	B		115236	W005.8	4930	1229	1422	4931A	B
4930	1308	1356	4931A	B		133952	W032.5	4931	1421	1618	4932A	A
4931	1455	1544	4932A	A		152709	W059.4	4932	1556	1731	4932A	B
4932	1642	1731	4932A	B		171425	W086.2	4933	1737	1917	4933A	B
4933	1830	1916	4933A	B		190142	W113.0	4934	1922	2104	4934A	B
4934	2017	2104	4934A	B		204858	W139.8	4935	2110	2250	4935A	B
4935	2204	2249	4935A	B		223615	W166.6					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
4923	0140	0224	4925R	A		020228	W038.2	0140	0333	4925R	A	
4924	0313	0333	4925R	A		034944	W065.1	0329	0521	4925R	B	
4924	0329	0411	4925R	B				0527	0710	4926R	B	
4925	0500	0521	4925R	B		053701	W091.9	0715	0850	4927A	B	
4925	0527	0559	4926R	B				0854	1036	4928A	B	
4926	0647	0709	4926R	B		072417	W118.7	1041	1223	4929A	B	
4926	0715	0746	4927A	B				1229	1422	4931A	B	
4927	0835	0849	4927A	B		091134	W145.5	1421	1618	4932A	A	
4927	0854	0933	4928A	B				1556	1731	4932A	B	
4928	1022	1035	4928A	B		105850	W172.3	1736	1917	4933A	B	
4928	1041	1121	4929A	B				1921	2105	4934A	B	
4929	1209	1222	4929A	B		124607	E160.9	2255	0053	4935A	B	
4929	1229	1308	4931A	B								
4930	1356	1421	4931A	B		143323	E134.1					
4930	1421	1455	4932A	A								
4931	1544	1617	4932A	A		162040	E107.3					
4931	1556	1642	4932A	B								
4932	1736	1830	4933A	B		180756	E080.5					
4933	1921	2017	4934A	B		195513	E053.6					
4934	2110	2204	4935A	B		214229	E026.8					
4935	2256	2351	4938R	A		232946	000.0					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
14 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4936	2351	0040	4938R	A		002331	E166.5	4936	2256	0053	4938R	A
4937			49			021048	E139.7	4938	0241	0434	4938R	B
4938	0326	0415	4938R	B		035804	E112.9	4939	0441	0623	4939R	B
4939	0513	0602	4939R	B		054521	E086.1	4940	0629	0804	4940A	B
4940	0701	0749	4940A	B		073237	E059.3	4941	0810	0950	4941A	B
4941	0848	0936	4941A	B		091954	E032.4	4942	0955	1152	4943A	B
4942	1035	1124	4943A	B		110710	E005.6	4943	1151	1325	4943A	A
4943	1222	1311	4943A	A		125427	W021.2	4944	1325	1505	4944A	B
4944	1410	1458	4944A	B		144143	W048.0	4945	1510	1650	4945A	B
4945	1557	1645	4945A	B		162900	W074.8	4946	1655	1833	4946A	B
4946	1744	1833	4946A	B		181616	W101.7	4947	1839	2020	4947A	B
4947	1932	2020	4947A	B		200333	W128.5	4948	2026	2210	4948A	B
4948	2119	2207	4948A	B		215049	W155.3					
4949						233806	E177.9					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
4936	0040	0053	4938R	A		011702	W026.8	2255	0053	4938R	A	
4937	0242	0326	4938R	B		030418	W053.7	0241	0435	4938R	B	
4938	0415	0434	4938R	B		045135	W080.5	0440	0624	4939R	B	
4938	0440	0513	4939R	B				0629	0805	4940A	B	
4939	0602	0624	4939R	B		063851	W107.3	0810	0950	4941A	B	
4939	0629	0701	4940A	B				0955	1151	4943A	B	
4940	0749	0804	4940A	B		082608	W134.1	1151	1325	4943A	A	
4940	0810	0848	4941A	B				1325	1505	4944A	B	
4941	0936	0949	4941A	B		101324	W161.0	1510	1650	4945A	B	
4941	0955	1035	4943A	B				1655	1834	4946A	B	
4942	1124	1151	4943A	B		120041	E172.3	1839	2021	4947A	B	
4942	1151	1222	4943A	A				2025	2210	4948A	B	
4943	1311	1323	4943A	A		134757	E145.4					
4943	1325	1410	4944A	B								
4944	1458	1504	4944A	B		153514	E118.6					
4944	1510	1557	4945A	B								
4945	1655	1744	4946A	B		172230	E091.8					
4946	1839	1932	4947A	B		190947	E065.0					
4947	2025	2119	4948A	B		205703	E038.2					
4948						224420	E011.3					
4949	0013	0053	4952R	A		003136	W015.5					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
15 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4950	0053	0142	4952R	A		012522	E151.1	4950	0013	0205	4952R	A
4951	0241	0329	4951R	B		031238	E124.3	4951	0157	0354	4951R	B
4952	0428	0516	4952R	B		045955	E097.5	4952	0400	0537	4952R	B
4953	0615	0704	4953A	B		064711	E070.6	4953	0543	0719	4953A	B
4954	0802	0851	4954A	B		083428	E043.8	4954	0724	0906	4954A	B
4955	0950	1038	4955A	B		102144	E017.0	4955	0912	1050	4955A	B
4956	1137	1225	4956A	B		120901	W009.8	4956	1055	1238	4956A	B
4957	1324	1413	4958A	B		135617	W036.6	4957	1243	1437	4958A	B
4958	1512	1600	4959A	A		154334	W063.5	4958	1437	1635	4959A	A
4959	1659	1746	4959A	B		173050	W090.3	4959	1612	1748	4959A	B
4960	1846	1931	4960A	B		191807	W117.1	4960	1753	1932	4960A	B
4961	2033	2120	4961A	B		210523	W143.9	4961	1938	2120	4961A	B
4962	2221	2309	4962A	B		225240	W170.8	4962	2126	2211	4962A	B
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
4950	0142	0204	4952R	A		021853	W042.3		0013	0205	4952R	A
4950	0157	0241	4951R	B					0157	0354	4951R	B
4951	0329	0355	4951R	B		040609	W069.1		0401	0538	4952R	B
4951	0400	0428	4952R	B					0543	0718	4953A	B
4952	0516	0537	4952R	B		055326	W095.9		0724	0907	4954A	B
4952	0543	0615	4953A	B					0912	1050	4955A	B
4953	0704	0718	4953A	B		074042	W122.8		1055	1238	4956A	B
4953	0724	0802	4954A	B					1243	1437	4958A	B
4954	0851	0905	4954A	B		092759	W149.6		1437	1635	4959A	A
4954	0912	0950	4955A	B					1611	1747	4959A	B
4955	1038	1049	4955A	B		111515	W176.4		1753	1932	4960A	B
4955	1055	1137	4956A	B					1937	2121	4961A	B
4956	1225	1237	4956A	B		130232	E156.8		2125	2311	4962A	B
4956	1243	1324	4958A	B								
4957	1413	1437	4958A	B		144948	E130.0					
4957	1437	1512	4959A	A								
4958	1600	1623	4959A	A		163705	E103.1					
4958	1611	1659	4959A	B								
4959	1752	1846	4960A	B		182421	E076.3					
4960	1937	2033	4961A	B		201138	E049.5					
4961	2125	2221	4962A	B		215854	E022.7					
4962	2312	0008	4965R	A		234611	W004.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
16 DECEMBER 1973

THIR							ASC. AND DESC. NODE		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR						ASC. NODE						
4963	0008	0056	4965R	A			003956	E162.5	4963	2311	0109	4965R	A
4964							022713	E135.6	4965	0259	0450	4965R	B
4965	0342	0431	4965R	B			041429	E108.8	4966	0458	0642	4966R	B
4966	0530	0618	4966A	B			060146	E082.0	4967	0646	0822	4967A	B
4967	0717	0805	4967A	B			074902	E055.2	4968	0826	1008	4968A	B
4968	0904	0953	4968A	B			093619	E028.4	4969	1013	1153	4969A	B
4969	1052	1140	4969A	B			112335	E001.5	4970	1158	1354	4971A	B
4970	1239	1327	4971A	B			131052	W025.3	4971	1352	1550	4972A	A
4971	1426	1515	4972A	A			145808	W052.1	4972	1529	1705	4972A	B
4972	1613	1702	4972A	B			164525	W078.9	4973	1709	1848	4973A	B
4973	1801	1846	4973A	B			183241	W105.7	4974	1853	2036	4974A	B
4974	1948	2036	4974A	B			201958	W132.6	4975	2041	2225	4975A	B
4975	2135	2224	4975A	B			220714	W159.4					
4976							235430	E173.8					
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
4963	0056	0109	4965R	A			013327	W031.0	2311	0109	4965R	A	
4964	0259	0342	4965R	B			032044	W057.8	0258	0451	4965R	B	
4965	0431	0450	4965R	B			050800	W084.6	0456	0641	4966R	B	
4965	0456	0530	4966A	B					0646	0821	4967A	B	
4966	0618	0641	4966A	B			065517	W111.4	0826	1007	4968A	B	
4966	0647	0717	4967A	B					1013	1153	4969A	B	
4967	0805	0820	4967A	B			084233	W138.2	1158	1354	4971A	B	
4967	0826	0904	4968A	B					1529	1705	4972A	A	
4968	0953	1007	4968A	B			102950	W165.1	1351	1550	4972A	B	
4968	1012	1052	4969A	B					1709	1848	4973A	B	
4969	1140	1152	4969A	B			121706	E168.2	1853	2037	4974A	B	
4969	1158	1239	4971A	B					2041	2226	4975A	B	
4970	1327	1353	4971A	B			140423	E141.3					
4970	1351	1426	4972A	A									
4971	1515	1546	4972A	A			155139	E114.5					
4971	1529	1613	4972A	B									
4972	1709	1801	4973A	B			173856	E087.7					
4973	1853	1948	4974A	B			192612	E060.9					
4974	2041	2135	4975A	B			211329	E034.1					
4975							230045	E007.2					
4976	0027	0110	4979R	A			004801	W019.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
17 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
4977	0110	0158	4979R	A		014147	E147.0	4977	0027	0220	4979R	A
4978	0257	0345	4978R	B		032903	E120.2	4978	0213	0408	4978R	B
4979	0444	0533	4979R	B		051620	E093.3	4979	0414	0553	4979R	B
4980	0632	0720	4980A	B		070336	E066.5	4980	0559	0734	4980A	B
4981	0819	0907	4981A	B		085053	E039.7	4981	0739	0921	4981A	B
4982	1006	1055	4982A	B		103809	E012.9	4982	0927	1109	4982A	B
4983	1153	1242	4983A	B		122526	W013.9	4983	1114	1254	4983A	B
4984	1341	1429	4985A	B		141242	W040.8	4984	1259	1453	4985A	B
4985	1528	1616	4985A	A		155959	W067.6	4985	1452	1625	4986A	B
4986	1715	1804	4986A	B		174715	W094.4	4986	1626	1805	4986A	A
4987	1902	1948	4987A	B		193432	W121.2	4987	1810	1949	4987A	B
4988	2050	2134	4988A	B		212148	W148.0	4988	1954	2137	4988A	B
4989						230905	W174.9					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
4977	0158	0220	4979R	A		023518	W046.4		0027	0220	4979R	A
4977	0213	0257	4978R	B					0213	0409	4978R	B
4978	0345	0408	4978R	B		042234	W073.2		0414	0553	4979R	B
4978	0414	0444	4979R	B					0558	0735	4980A	B
4979	0533	0552	4979R	B		060951	W100.0		0739	0922	4981A	B
4979	0558	0632	4980A	B					0927	1109	4982A	B
4980	0720	0734	4980A	B		075707	W126.9		1114	1254	4983A	B
4980	0739	0819	4981A	B					1259	1454	4985A	B
4981	0907	0921	4981A	B		094424	W153.7		1453	1626	4985A	A
4981	0927	1006	4982A	B					1626	1805	4986A	B
4982	1055	1109	4982A	B		113140	E179.5		1810	1949	4987A	B
4982	1114	1153	4983A	B					1954	2138	4988A	B
4983	1242	1253	4983A	B		131857	E152.7					
4983	1259	1341	4985A	B								
4984	1429	1452	4985A	B		150613	E125.9					
4984	1453	1528	4985A	A								
4985	1616	1625	4985A	A		165330	E099.1					
4985	1627	1715	4986A	B								
4986	1810	1902	4987A	B		184046	E072.2					
4987	1954	2050	4988A	B		202803	E045.4					
4988						221519	E018.6					
4989	2342	0024	4992R	A		000236	W008.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
18 DECEMBER 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
4990	0024	0113	4992R	A		005621	E158.3	4990	2346	0137	4992R	A
4991						024338	E131.5	4992	0315	0508	4992R	B
4992	0359	0447	4992R	B		043054	E104.7	4993	0514	0658	4993R	B
4993	0546	0635	4993R	B		061811	E077.9	4994	0703	0835	4994A	B
4994	0733	0822	4994A	B		080527	E051.0	4995	0840	1021	4995A	B
4995	0921	1009	4995A	B		095244	E024.2	4996	1028	1206	4996A	B
4996	1108	1156	4996A	B		114000	W002.6	4997	1212	1409	4998A	B
4997	1255	1344	4998A	B		132717	W029.4	4998	1410	1608	4999A	A
4998	1442	1531	4999A	A		151433	W056.2	4999	1608	1609	4999A	B
4999*	1630	1718	4999A	B		170150	W083.1	5000	1725	1905	5000A	B
5000	1817	1904	5000A	B		184906	W109.9	5001	1910	2054	5001A	B
5001	2004	2051	5001A	B		203623	W136.7	5002	2058	2241	5002A	B
5002	2152	2237	5002A	B		222339	W163.5					
*NO 11.5 DATA												
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
4990	0113	0137	4992R	A		014952	W035.0	2342	0137	4992R	A	
4991	0315	0359	4992R	B		033709	W061.9	0315	0509	4992R	B	
4992	0447	0508	4992R	B		052425	W088.7	0514	0658	4993R	B	
4992	0514	0546	4993R	B				0703	0835	4994A	B	
4993	0635	0657	4993R	B		071142	W115.5	0840	1023	4995A	B	
4993	0703	0733	4994A	B				1028	1206	4996A	B	
4994	0822	0834	4994A	B		085858	W142.3	1211	1409	4998A	B	
4994	0840	0921	4995A	B				1410	1608	4999A	A	
4995	1009	1022	4995A	B		104615	W169.1	1608	1720	4990A	B	
4995	1028	1108	4996A	B				1725	1905	5000A	B	
4996	1156	1206	4996A	B		123331	E164.0	1910	2053	5001A	B	
4996	1211	1255	4998A	B				2058	2242	5002A	B	
4997	1344	1410	4998A	B		142048	E137.2					
4997	1411	1442	4999A	A								
4998	1531	1607	4999A	A		160804	E110.4					
4999	1725	1817	5000A	B		175521	E083.6					
5000	1910	2004	5001A	B		194237	E056.8					
5001	2058	2152	5002A	B		212954	E029.9					
5002						231710	E003.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
19 DECEMBER 1973

THIR							ASC. AND		ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR		DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR						ASC. NODE						
5003							001056	E169.7	5004	0037	0235	5005R	A
5004	0126	0215	5005R	A			015812	E142.9	5005	0230	0423	5005R	B
5005	0313	0402	5005R	B			034528	E116.0	5006	0429	0611	5006R	B
5006	0501	0549	5006R	B			053245	E089.2	5007	0617	0749	5007A	B
5007	0648	0736	5007A	B			072001	E062.4	5008	0754	0937	5008A	B
5008	0835	0924	5008A	B			090718	E035.6	5009	0943	1127	5009A	B
5009	1022	1111	5009A	B			105434	E008.8	5010	1132	1310	5010A	B
5010	1210	1258	5010A	B			124151	W018.1	5011	1315	1511	5012A	B
5011	1357	1446	5012A	B			142907	W044.9	5012	1509	1640	5012A	A
5012	1544	1633	5012A	A			161624	W071.7	5013	1643	1820	5013A	B
5013*	1732	1811	5013A	B			180340	W098.5	5014	1825	2007	5014A	B
5014	1919	2005	5014A	B			195057	W125.3	5015	2012	2154	5015A	B
5015	2106	2153	5015A	B			213813	W152.1					
5016							232530	W178.9					
*DIFFERENT 6.7 TIME													
5013	1732	1819	5013A	B									
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
5003	0043	0126	5005R	A			010427	W023.7	0043	0235	5005R	A	
5004	0215	0234	5005R	A			025143	W050.5	0230	0423	5005R	B	
5004	0230	0313	5005R	B					0429	0612	5006R	B	
5005	0402	0423	5005R	B			043900	W077.3	0617	0750	5007A	B	
5005	0429	0501	5006R	B					0754	0938	5008A	B	
5006	0549	0611	5006R	B			062616	W104.2	0943	1127	5009A	B	
5006	0617	0648	5007A	B					1132	1310	5010A	B	
5007	0736	0749	5007A	B			081333	W131.0	1315	1510	5012A	B	
5007	0754	0835	5008A	B					1509	1641	5012A	A	
5008	0924	0937	5008A	B			100049	W157.8	1642	1820	5013A	B	
5008	0943	1022	5009A	B					1825	2007	5014A	B	
5009	1111	1126	5009A	B			114806	E175.4	2012	2154	5015A	B	
5009	1132	1210	5010A	B					2358	0153	5019R	A	
5010	1258	1309	5010A	B			133522	E148.6					
5010	1315	1357	5012A	B									
5011	1446	1509	5012A	B			152239	E121.7					
5011	1509	1544	5012A	A									
5012	1633	1639	5012A	A			170955	E094.9					
5012	1643	1732	5013A	B									
5013	1825	1919	5014A	B			185712	E068.1					
5014	2015	2106	5015A	B			204428	E041.3					
5015							223145	E014.5					
5016	2358	0041	5019R	A			001901	W012.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
20 DECEMBER 1973

THIR							ASC. AND DESC. NODE		ESMR				
	11.5 + 6.7		INT ORBIT +	H D R	THIR GRID CORR		TIME	LONG				INT ORBIT +	H D R
DATA ORBIT	ON HRMN	OFF HRMN	STDN	S	LALO		HRMNSS	DEG	DATA ORBIT	ON HRMN	OFF HRMN	STDN	S
	DAYTIME THIR						ASC. NODE						
5017	0041	0129	5019R	A			011246	E154.2	5017	2358	0153	5019R	A
5018							030003	E127.4	5019	0344	0447	5019R	B
5019	0415	0504	5019R	B			044719	E100.6	5020	0530	0713	5020R	B
5020	0602	0651	5020R	B			063436	E073.8	5021	0719	0851	5021A	B
5021	0750	0838	5021A	B			082152	E047.0	5022	0856	1040	5022A	B
5022	0937	1026	5022A	B			100909	E020.1	5023	1045	1225	5023A	B
5023	1124	1213	5023A	B			115625	W006.7	5024	1230	1425	5025A	B
5024	1312	1400	5025A	B			134342	W033.5	5025	1422	1555	5025A	A
5025	1459	1547	5025A	A			153058	W060.3	5026	1557	1738	5026A	B
5026	1646	1735	5026A	B			171815	W087.1	5027	1743	1922	5027A	B
5027	1833	1921	5027A	B			190531	W114.0	5028	1927	2112	5028A	B
5028	2021	2109	5028A	B			205248	W140.8	5029	2116	2255	5029A	B
5029	2208	2254	5029A	B			224004	W167.6					
	NIGHTTIME THIR						DESC. NODE			NEMS - SCR - ITPR			
5017	0129	0147	5019R	A			020618	W039.2		0341	0447	5019R	B
5018	0341	0415	5019R	B			035334	W066.0		0529	0713	5020R	B
5019	0504	0523	5019R	B			054050	W092.8		0719	0851	5021A	B
5019	0528	0602	5020R	B						0856	1040	5022A	B
5020	0651	0713	5020R	B			072807	W119.6		1045	1226	5023A	B
5020	0719	0750	5021A	B						1230	1426	5025A	B
5021	0838	0850	5021A	B			091523	W146.4		1422	1556	5025A	A
5021	0856	0937	5022A	B						1557	1738	5026A	B
5022	1026	1038	5022A	B			110240	W173.3		1743	1922	5027A	B
5022	1055	1124	5023A	B						1927	2111	5028A	B
5023*	1213	1225	5023A	B			124956	E159.9		2117	2256	5029A	B
5023	1231	1312	5025A	B									
5024*	1400	1419	5025A	B			143713	E133.1					
5024	1421	1459	5025A	A									
5025	1547	1556	5025A	A			162429	E106.3					
5025	1557	1646	5026A	B									
5026	1743	1833	5027A	B			181146	E079.5					
5027	1927	2021	5028A	B			195902	E052.7					
5028	2117	2208	5029A	B			214619	E025.8					
5029							233335	W001.0					
*DIFFERENT 6.7 TIMES													
5023	1213	1220	5023A	B									
5024	1400	1425	5025A	B									

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
21 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
5030						002721	E165.6	5031	0058	0251	5032R	A
5031	0143	0231	5032R	A		021437	E138.8	5032	0245	0439	5032R	B
5032	0330	0418	5032R	B		040153	E111.9	5033	0445	0627	5033R	B
5033	0517	0606	5033R	B		054910	E085.1	5034	0633	0807	5034A	B
5034	0704	0753	5034A	B		073626	E058.3	5035	0813	0954	5035A	B
5035	0852	0940	5035A	B		092343	E031.5	5036	0959	1144	5036A	B
5036	1039	1127	5036A	B		111059	E004.7	5037	1149	1340	5038A	B
5037	1226	1315	5038A	B		125816	W022.2	5038	1340	1512	5038A	A
5038	1413	1502	5038A	A		144532	W049.0	5039	1513	1654	5039A	B
5039	1601	1649	5039A	B		163249	W075.8	5040	1658	1835	5040A	B
5040	1748	1835	5040A	B		182005	W102.6	5041	1841	2027	5041A	B
5041	1935	2024	5041A	B		200722	W129.4	5042	2031	2214	5042A	B
5042	2123	2211	5042A	B		215438	W156.3	5043	2215	0012	5046R	A
5043	2310	2358	5046R	A		234155	E176.9					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
5030	0059	0143	5032R	A		012052	W027.8	0059	0250	5032R	A	
5031	0231	0249	5032R	A		030808	W054.6	0245	0439	5032R	B	
5031	0246	0330	5032R	B				0445	0627	5033R	B	
5032	0418	0438	5032R	B		045525	W081.4	0633	0808	5034A	B	
5032	0445	0517	5033R	B				0813	0954	5035A	B	
5033	0606	0627	5033R	B		064241	W108.3	0959	1145	5036A	B	
5033	0633	0704	5034A	B				1149	1341	5038A	B	
5034	0753	0807	5034A	B		082958	W135.1	1339	1513	5038A	A	
5034	0812	0852	5035A	B				1513	1654	5039A	B	
5035	0940	0953	5035A	B		101714	W161.9	1658	1836	5040A	B	
5035	0959	1039	5036A	B				1840	2027	5041A	B	
5036	1127	1144	5036A	B		120431	E171.3	2031	2214	5042A	B	
5036	1150	1226	5038A	B				2215	0012	5046R	A	
5037	1315	1340	5038A	B		135147	E144.5					
5037	1340	1413	5038A	A								
5038	1502	1511	5038A	A		153904	E117.6					
5038	1513	1601	5039A	B								
5039	1658	1748	5040A	B		172620	E090.8					
5040	1840	1935	5041A	B		191337	E064.0					
5041	2031	2123	5042A	B		210053	E037.2					
5042	2215	2310	5046R	A		224810	E010.4					
5043	2358	0012	5046R	A		003526	W016.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
22 DECEMBER 1973

THIR						ASC. AND		ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
5044						012911	E150.1	5045	0200	0358	5045R	B
5045	0244	0333	5045R	B		031628	E123.3	5046	0404	0539	5046R	B
5046	0432	0520	5046R	B		050344	E096.5	5047	0546	0722	5047A	B
5047	0619	0707	5047A	B		065101	E069.7	5048	0728	0909	5048A	B
5048	0806	0855	5048A	B		083817	E042.8	5049	0914	1055	5049A	B
5049	0953	1042	5049A	B		102534	E016.0	5050	1100	1240	5050A	B
5050	1141	1229	5050A	B		121250	W010.8	5051	1245	1442	5052A	B
5051	1328	1417	5052A	B		140007	W037.6	5052	1441	1611	5052A	A
5052	1515	1604	5052A	A		154723	W064.5	5053	1613	1755	5053A	B
5053	1703	1751	5053A	B		173440	W091.3	5054	1800	1939	5054A	B
5054	1850	1938	5054A	B		192156	W118.1	5055	1944	2124	5055A	B
5055	2037	2123	5055A	B		210913	W144.9	5056	2129	2312	5056A	B
5056	2224	2312	5056A	B		225629	W171.7					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5044	0201	0244	5045R	B		022243	W043.3		0201	0358	5045R	B
5045	0333	0358	5045R	B		040959	W070.1		0404	0539	5046R	B
5045	0405	0432	5046R	B					0545	0723	5047A	B
5046	0520	0539	5046R	B		055716	W096.9		0727	0909	5048A	B
5046	0545	0619	5047A	B					0914	1055	5049A	B
5047	0707	0722	5047A	B		074432	W123.7		1100	1241	5050A	B
5047	0727	0806	5048A	B					1245	1442	5052A	B
5048	0855	0908	5048A	B		093149	W150.5		1441	1612	5052A	A
5048	0914	0953	5049A	B					1613	1755	5053A	B
5049	1042	1054	5049A	B		111905	W177.4		1800	1939	5054A	B
5049	1100	1141	5050A	B					1944	2124	5055A	B
5050	1229	1240	5050A	B		130622	E155.8		2129	2313	5056A	B
5050	1245	1328	5052A	B								
5051	1417	1441	5052A	B		145338	E129.0					
5051	1441	1515	5052A	A								
5052	1604	1611	5052A	A		164055	E102.2					
5052	1613	1703	5053A	B								
5053	1800	1850	5054A	B		182811	E075.4					
5054	1944	2037	5055A	B		201528	E049.5					
5055	2129	2224	5056A	B		220244	E021.7					
5056						235001	W005.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
23 DECEMBER 1973

THIR							ASC. AND		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO		DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR						ASC. NODE						
5057							004345	E161.5	5058	0115	0306	5059R	A
5058	0159	0247	5059R	A			023102	E134.7	5059	0303	0454	5059R	B
5059	0346	0435	5059R	B			041818	E107.9	5060	0502	0645	5060R	B
5060	0533	0622	5060R	B			060535	E081.0	5061	0650	0828	5061A	B
5061	0721	0809	5061A	B			075251	E054.2	5062	0832	1009	5062A	B
5062	0908	0957	5062A	B			094008	E027.4	5063	1014	1158	5063A	B
5063	1055	1144	5063A	B			112724	E000.6	5064	1203	1358	5065A	B
5064	1243	1331	5065A	B			131441	W026.2	5065	1357	1553	5066A	A
5065	1430	1518	5066A	A			150157	W053.1	5066	1531	1707	5066A	B
5066	1617	1706	5066A	B			164914	W079.9	5067	1712	1852	5067A	B
5067	1804	1852	5067A	B			183630	W106.7	5068	1857	2039	5068A	B
5068	1952	2038	5068A	B			202347	W133.5	5069	2044	2226	5069A	B
5069	2139	2226	5069A	B			221103	W160.4	5070	2230	0027	5073R	A
5070	2326	0015	5073R	A			235820	E172.8					
	NIGHTTIME THIR						DESC. NODE			NEMS - SCR - ITPR			
5057	0114	0159	5059R	A			013717	W031.9		0115	0306	5059R	A
5058	0247	0306	5059R	A			032434	W058.7		0302	0455	5059R	B
5058	0302	0346	5059R	B						0501	0645	5060R	B
5059	0435	0454	5059R	B			051150	W085.6		0650	0828	5061A	B
5059	0501	0533	5060R	B						0832	1009	5062A	B
5060	0622	0644	5060R	B			065907	W112.4		1014	1157	5063A	B
5060	0650	0721	5061A	B						1202	1358	5065A	B
5061	0809	0827	5061A	B			084623	W139.2		1357	1554	5066A	A
5061	0832	0908	5062A	B						1531	1707	5066A	B
5062	0957	1008	5062A	B			103340	W166.0		1711	1853	5067A	B
5062	1014	1055	5063A	B						1857	2039	5068A	B
5063	1144	1156	5063A	B			122056	E167.2		2044	2227	5069A	B
5063	1202	1243	5065A	B						2230	0027	5073R	A
5064	1331	1356	5065A	B			140812	E140.4					
5064	1357	1430	5066A	A									
5065	1518	1553	5066A	A			155529	E113.5					
5065	1531	1617	5066A	B									
5066	1712	1804	5067A	B			174245	E086.7					
5067	1857	1952	5068A	B			193002	E059.9					
5068	2044	2139	5069A	B			211718	E033.1					
5069	2230	2326	5073R	A			230435	E006.3					
5070	0015	0027	5073R	A			005151	W020.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
24 DECEMBER 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
5071						014536	E146.0	5072	0216	0413	5072R	B
5072	0301	0349	5072R	B		033253	E119.2	5073	0418	0556	5073R	B
5073	0448	0537	5073R	B		052009	E092.4	5074	0603	0738	5074A	B
5074	0635	0724	5074A	B		070726	E065.6	5075	0743	0925	5075A	B
5075	0823	0911	5075A	B		085442	E038.7	5076	0930	1110	5076A	B
5076	1010	1058	5076A	B		104159	E011.9	5077	1115	1259	5077A	B
5077	1157	1246	5077A	B		122915	W014.9	5078	1304	1450	5079A	B
5078	1344	1433	5079A	B		141632	W041.7	5079	1449	1627	5079A	A
5079	1532	1620	5079A	A		160348	W068.5	5080	1628	1810	5080A	B
5080	1719	1807	5080A	B		175105	W095.4	5081	1815	1952	5081A	B
5081	1906	1951	5081A	B		193821	W122.2	5082	1958	2145	5082A	B
5082	2054	2142	5082A	B		212537	W149.0					
5083						231254	W175.8					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5071	0217	0301	5072R	B		023908	W047.4		0217	0413	5072R	B
5072	0349	0412	5072R	B		042624	W074.2		0418	0557	5073R	B
5072	0419	0448	5073R	B					0603	0739	5074A	B
5073	0537	0557	5073R	B		061341	W101.0		0743	0925	5075A	B
5073	0603	0635	5074A	B					0930	1110	5076A	B
5074	0724	0738	5074A	B		080057	W127.8		1115	1259	5077A	B
5074	0743	0823	5075A	B					1303	1450	5079A	B
5075	0911	0924	5075A	B		094814	W154.7		1449	1627	5079A	A
5075	0930	1010	5076A	B					1628	1810	5080A	B
5076	1058	1109	5076A	B		113530	E178.5		1815	1952	5081A	B
5076	1115	1157	5077A	B					1957	2145	5082A	B
5077	1246	1258	5077A	B		132247	E151.7					
5077	1304	1344	5079A	B								
5078	1433	1448	5079A	B		151003	E124.9					
5078	1449	1532	5079A	A								
5079	1620	1626	5079A	A		165720	E098.1					
5079	1628	1719	5080A	B								
5080	1815	1906	5081A	B		184436	E071.3					
5081	1957	2054	5082A	B		203153	E044.4					
5072						221909	E017.6					
5083						000626	W009.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
25 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5084						010010	E157.4	5085	0132	0320	5086R	A
5085	0215	0304	5086R	A		024727	E130.5	5086	0319	0512	5086R	B
5086	0403	0451	5086R	B		043443	E103.7	5087	5018	0700	5087R	B
5087	0550	0638	5087R	B		062200	E076.9	5088	0705	0841	5088A	B
5088	0737	0826	5088A	B		080916	E050.1	5089	0845	1025	5089A	B
5089	0924	1013	5089A	B		095633	E023.3	5090	1030	1211	5090A	B
5090	1112	1200	5090A	B		114349	W003.6	5091	1217	1413	5092A	B
5091	1259	1348	5092A	B		133106	W030.4	5092	1413	1610	5093A	A
5092	1446	1535	5093A	A		151822	W057.2	5093	1547	1723	5093A	B
5093	1634	1722	5093A	B		170539	W084.0	5094	1728	1908	5094A	B
5094	1821	1905	5094A	B		185255	W110.8	5095	1913	2056	5095A	B
5095	2008	2056	5095A	B		204012	W137.7	5096	2101	2243	5096A	B
5096	2155	2242	5096A	B		222728	W164.5					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5084	0132	0215	5086R	A		015342	W036.0		0132	0320	5086R	A
5085	0304	0320	5086R	A		034059	W062.8		0319	0512	5086R	B
5085	0320	0403	5086R	B					0518	0700	5087R	B
5086	0451	0512	5086R	B		052815	W089.7		0702	0841	5088A	B
5086	0518	0550	5087R	B					0846	1026	5089A	B
5087	0638	0659	5087R	B		071532	W116.5		1031	1212	5090A	B
5087	0705	0737	5088A	B					1217	1414	5092A	B
5088	0826	0840	5088A	B		090248	W143.3		1413	1610	5093A	A
5088	0846	0924	5089A	B					1547	1724	5093A	B
5089	1013	1025	5089A	B		105005	W170.1		1728	1908	5094A	B
5089	1031	1112	5090A	B					1912	2057	5095A	B
5090	1200	1211	5090A	B		123721	E163.1		2101	2243	5096A	B
5090	1217	1259	5092A	B								
5091	1348	1413	5092A	B		142438	E136.2					
5091	1413	1446	5093A	A								
5092	1535	1608	5093A	A		161154	E109.4					
5092	1547	1634	5093A	B								
5093	1728	1821	5094A	B		175911	E082.6					
5094	1913	2008	5095A	B		194627	E055.8					
5095	2101	2155	5096A	B		213344	E029.0					
5096	2247	2343	5099R	A		232100	E002.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
26 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5097	2343	0031	5099R	A		001445	E168.7	5097	2247	0045	5099R	A
5098						020201	E141.9	5099	0233	0425	5099R	B
5099	0317	0406	5099R	B		034918	E115.1	5100	0433	0615	5100R	B
5100	0504	0553	5100R	B		053634	E088.2	5101	0620	0755	5101A	B
5101	0652	0740	5101A	B		072351	E061.4	5102	0800	0943	5102A	B
5102	0839	0928	5102A	B		091107	E034.7	5103	0949	1128	5103A	B
5103	1026	1115	5103A	B		105824	E007.8	5105	1327	1523	5106A	A
5104	1214	1302	5105A	B		124540	W019.0	5106	1503	1639	5106A	B
5105	1401	1449	5106A	A		143256	W045.9	5107	1644	1827	5107A	B
5106	1548	1637	5106A	B		162013	W072.7	5108	1832	2010	5108A	B
5107	1735	1824	5107A	B		180729	W099.5	5109	2015	2200	5109A	B
5108	1923	2010	5108A	B		195446	W126.3					
5109	2110	2158	5109A	B		214202	W153.1					
5110						232919	W179.9					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5097	0031	0045	5099R	A		010817	W024.7		2247	0045	5099R	A
5098	0232	0317	5099R	B		025533	W051.5		0233	0426	5099R	B
5099	0406	0425	5099R	B		044250	W078.3		0432	0615	5100R	B
5099	0432	0504	5100R	B					0621	0755	5101A	B
5100	0553	0614	5100R	B		063006	W105.1		0759	0943	5102A	B
5100	0621	0652	5101A	B					0948	1128	5103A	B
5101	0740	0754	5101A	B		081723	W132.0		1133	1327	5105A	B
5101	0759	0839	5102A	B					1327	1523	5106A	A
5102	0928	0943	5102A	B		100439	W158.8		1503	1640	5106A	B
5102	0948	1026	5103A	B					1644	1827	5107A	B
5103	1115	1127	5103A	B		115156	E174.4		1832	2010	5108A	B
5103	1133	1214	5105A	B					2015	2201	5109A	B
5104	1302	1327	5105A	B		133912	E147.6					
5104	1327	1401	5106A	A								
5105	1449	1523	5106A	A		152628	E120.8					
5105	1503	1548	5106A	B								
5106	1644	1735	5107A	B		171345	E094.0					
5107	1832	1923	5108A	B		190101	E067.1					
5108	2015	2110	5109A	B		204818	E040.3					
5109						223534	E013.5					
5110	0002	0044	5113R	A		002251	W013.3					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
27 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5111	0044	0133	5113R	A		011635	E153.3	5111	0014	0156	5113R	A
5112	0232	0320	5112R	B		030352	E126.4	5112	0147	0345	5112R	B
5113	0419	0508	5113R	B		045108	E099.6	5113	0351	0529	5113R	B
5114	0606	0655	5114R	B		063825	E072.8	5114	0537	0717	5114R	B
5115	0754	0842	5115A	B	1E	082541	E046.0	5115	0722	0856	5115A	B
5116	0941	1029	5116A	B	1W	101258	E019.2	5116	0901	1045	5116A	B
5117	1128	1217	5117A	B		120014	W007.7	5117	1051	1228	5117A	B
5118	1315	1404	5119A	B		134731	W034.5	5118	1233	1430	5119A	B
5119	1503	1551	5120A	A		153447	W061.3	5119	1429	1605	5120A	A
5120	1650	1738	5120A	B	1W	172204	W088.1	5120	1602	1739	5120A	B
5121	1837	1922	5121A	B		190920	W114.9	5121	1744	1923	5121A	B
5122	2025	2110	5122A	B		205637	W141.7	5122	1930	2110	5122A	B
5123	2212	2300	5123A	B		224353	W168.6	5123	2117	2301	5123A	B
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5111	0133	0146	5113R	A		021007	W040.1		0002	0156	5113R	A
5111	0148	0232	5112R	B					0147	0346	5112R	B
5112	0320	0345	5112R	B		035724	W067.0		0351	0529	5113R	B
5112	0352	0419	5113R	B					0534	0717	5114R	B
5113	0508	0528	5113R	B		054440	W093.8		0723	0857	5115A	B
5113	0534	0606	5114R	B					0901	1045	5116A	B
5114*	0655	0717	5114R	B		073157	W120.6		1051	1229	5117A	B
5114	0723	0754	5115A	B	1W				1233	1431	5119A	B
5115	0842	0856	5115A	B	1W	091913	W147.4		1430	1606	5120A	A
5115	0901	0941	5116A	B	1E				1602	1740	5120A	B
5116	1029	1045	5116A	B	1E	110630	W174.2		1744	1923	5121A	B
5116	1051	1128	5117A	B					1928	2111	5112A	B
5117	1233	1315	5119A	B		125346	E159.0		2116	2301	5123A	B
5118	1404	1429	5119A	B		144103	E132.2					
5118	1429	1503	5120A	A								
5119	1551	1604	5120A	A		162819	E105.3					
5119	1602	1650	5120A	B	1E							
5120	1744	1837	5121A	B		181536	E078.5					
5121	1928	2025	5122A	B		200252	E051.7					
5122	2116	2212	5123A	B		215009	E024.9					
5123	2306	2359	5126R	A		233725	W001.9					
*DIFFERENT 6.7 TIME												
5114	0655	0708	5114R	B								

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
28 DECEMBER 1973

THIR							ASC. AND DESC. NODE		ESMR				
	11.5 + 6.7		INT ORBIT +	H D R	THIR GRID CORR		TIME	LONG				INT ORBIT +	H D R
DATA ORBIT	ON HRMN	OFF HRMN	STDN	S	LALO		HRMNSS	DEG	DATA ORBIT	ON HRMN	OFF HRMN	STDN	S
	DAYTIME THIR						ASC. NODE						
5124	2359	0048	5126R	A			003110	E164.6	5124	2306	0104	5126R	A
5125							021826	E137.8	5126	0252	0444	5126R	B
5126	0334	0422	5126R	B			040543	E111.0	5127	0439	0630	5127R	B
5127	0521	0609	5127R	B			055259	E084.2	5128	0636	0811	5128A	B
5128	0708	0757	5128A	B			074016	E057.3	5129	0817	1000	5129A	B
5129	0855	0944	5129A	B			092732	E030.5	5130	1007	1142	5130A	B
5130	1043	1131	5130A	B			111448	E003.7	5131	1150	1344	5132A	A
5131	1230	1319	5132A	B			130205	W023.1	5132	1344	1515	5132A	B
5132	1447	1506	5132A	A			144921	W049.9	5133	1517	1656	5133A	B
5133	1605	1653	5133A	B			163638	W076.8	5134	1701	1839	5134A	B
5134	1752	1838	5134A	B			182354	W103.6	5135	1845	2028	5135A	B
5135	1939	2027	5135A	B			201111	W130.4	5136	2033	2219	5136A	B
5136	2126	2215	5136A	B			215827	W157.2					
5137							234544	E176.0					
	NIGHTTIME THIR						DESC. NODE			NEMS - SCR - ITPR			
5124	0048	0102	5126R	A			012442	W028.8		2306	0103	5126R	A
5125	0252	0334	5126R	B			031158	W055.6		0253	0444	5126R	B
5126	0422	0443	5126R	B			045915	W082.4		0450	0630	5127R	B
5126	0450	0521	5127R	B						0637	0813	5128A	B
5127	0609	0631	5127R	B			064631	W109.2		0817	1001	5129A	B
5127	0636	0708	5128A	B						1007	1143	5130A	B
5128	0757	0812	5128A	B			083348	W136.0		1147	1345	5132A	A
5128	0817	0855	5129A	B						1343	1516	5132A	B
5129	0944	1001	5129A	B			102104	W162.9		1517	1657	5133A	B
5129	1007	1043	5130A	B						1701	1839	5134A	B
5130	1131	1142	5130A	B			120821	E170.3		1843	2028	5135A	B
5130	1147	1230	5132A	B						2033	2218	5136A	B
5131	1319	1343	5132A	B			135537	E143.5					
5131	1344	1417	5132A	A									
5132	1506	1515	5132A	A			154254	E116.7					
5132	1517	1605	5133A	B									
5133	1701	1752	5134A	B			173010	E089.9					
5134	1844	1939	5135A	B			191727	E063.0					
5135	2033	2126	5136A	B			210443	E036.2					
5136							225200	E009.4					
5137	0021	0101	5140R	A			003916	W017.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
29 DECEMBER 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
5138	0101	0149	5140R	A		013300	E149.1	5138	0021	0213	5140R	A
5139	0248	0337	5139R	B		032017	E122.3	5139	0216	0403	5139R	B
5140	0435	0524	5140R	B		050733	E095.5	5140	0409	0546	5140R	B
5141	0623	0711	5141A	B		065450	E068.7	5141	0552	0727	5141A	B
5142	0810	0859	5142A	B		084206	E041.9	5142	0732	0913	5142A	B
5143	0957	1046	5143A	B		102923	E015.0	5143	0918	1103	5143A	B
5144	1145	1233	5144A	B		121639	W011.8	5144	1108	1244	5144A	B
5145	1332	1420	5146A	B		140356	W038.6	5145	1249	1422	5146A	B
5146	1519	1608	5146A	A		155112	W065.4	5146	1421	1615	5146A	A
5147	1706	1755	5147A	B		173829	W092.2	5147	1616	1756	5147A	B
5148	1854	1940	5148A	B		192545	W119.1	5148	1802	1940	5148A	B
5149	2041	2126	5149A	B		211302	W145.9	5149	1946	2126	5149A	B
5150	2228	2316	5150A	B		230018	W172.7	5150	2132	2315	5150A	B
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5138	0149	0213	5140R	A		022633	W044.2		0021	0213	5140R	A
5138	0213	0248	5139R	B					0213	0403	5139R	B
5139	0337	0402	5139R	B		041349	W071.1		0409	0547	5140R	B
5139	0409	0435	5140R	B					0552	0727	5141A	B
5140	0524	0546	5140R	B		060106	W097.9		0732	0913	5142A	B
5140	0552	0623	5141A	B					0918	1103	5143A	B
5141	0711	0726	5141A	B		074822	W124.7		1109	1244	5144A	B
5141	0732	0810	5142A	B					1249	1423	5146A	B
5142	0859	0912	5142A	B		093539	W151.5		1422	1616	5146A	A
5142	0918	0957	5143A	B					1617	1757	5147A	B
5143	1046	1102	5143A	B		112255	W178.3		1802	1940	5148A	B
5143	1109	1145	5144A	B					1945	2127	5149A	B
5144	1233	1242	5144A	B		131012	E154.8		2131	2317	5150A	B
5144	1249	1332	5146A	B								
5145	1422	1519	5146A	A		145728	E128.0					
5146	1608	1615	5146A	A		164444	E101.2					
5146	1617	1706	5147A	B								
5147	1802	1854	5148A	B		183201	E074.4					
5148	1945	2041	5149A	B		201917	E047.6					
5149	2132	2238	5150A	B		220634	E020.7					
5150	2322	0016	5153R	A		235350	W006.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
30 DECEMBER 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5151	0016	0104	5153R	A		004734	E160.5	5151	2321	0119	5153R	A
5152						023451	E133.7	5153	0309	0500	5153R	B
5153	0350	0439	5153R	B		042207	E106.9	5154	0505	0649	5154R	B
5154	0537	0626	5154R	B		060924	E080.1	5155	0654	0828	5155A	B
5155	0725	0813	5155A	B		075640	E053.3	5156	0833	1014	5156A	B
5156	0912	1000	5156A	B		094357	E026.4	5157	1019	1159	5157A	B
5157	1059	1148	5157A	B		113113	W000.4	5158	1205	1357	5159A	B
5158	1246	1335	5159A	B		131830	W027.2	5159	1357	1531	5159A	A
5159	1434	1522	5159A	A		150546	W054.1	5160	1533	1713	5160A	B
5160	1621	1709	5160A	B		165303	W080.9	5161	1718	1855	5161A	B
5161	1808	1853	5161A	B		184019	W107.7	5162	1901	2042	5162A	B
5162	1956	2041	5162A	B		202736	W134.5	5163	2047	2233	5163A	B
5163	2143	2231	5163A	B		221452	W161.3					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5151	0104	0119	5153R	A		014107	W032.9		2322	0119	5153R	A
5152	0309	0350	5153R	B		032823	W059.7		0309	0500	5153R	B
5153	0439	0459	5153R	B		051540	W086.5		0505	0650	5154R	B
5153	0505	0537	5154R	B					0654	0829	5155A	B
5154	0626	0649	5154R	B		070256	W113.4		0833	1014	5156A	B
5154	0655	0725	5155A	B					1019	1200	5157A	B
5155	0813	0827	5155A	B		085013	W140.2		1205	1358	5159A	B
5155	0833	0912	5156A	B					1357	1532	5159A	A
5156	1000	1013	5156A	B		103729	W167.0		1533	1713	5160A	B
5156	1019	1059	5157A	B					1718	1855	5161A	B
5157	1148	1159	5157A	B		122446	E166.2		1900	2042	5162A	B
5157	1217	1246	5159A	B					2047	2234	5163A	B
5158	1335	1357	5159A	B		141202	E139.4					
5158	1357	1434	5159A	A								
5159	1522	1531	5159A	A		155919	E112.6					
5159	1532	1621	5160A	B								
5160	1718	1808	5161A	B		174635	E085.8					
5161	1900	1956	5162A	B		193352	E058.9					
5162	2047	2143	5163A	B		212108	E032.1					
5163						230825	E005.3					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
31 DECEMBER 1973

THIR							ASC. AND		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	DESC. TIME HRMNSS	NODE LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5164						000209	E171.9	5165	0040	0224	5166R	A
5165	0117	0206	5166R	A		014925	E145.1	5166	0224	0416	5166R	B
5166	0305	0353	5166R	B		033642	E118.2	5167	0422	0602	5167R	B
5167	0452	0540	5167R	B		052358	E091.4	5168	0608	0742	5168A	B
5168	0639	0728	5168A	B		071115	E064.6	5169	0748	0928	5169A	B
5169	0826	0915	5169A	B		085831	E037.8	5170	0934	1120	5170A	B
5170	1014	1102	5170A	B		104548	E011.0	5171	1124	1300	5171A	B
5171	1201	1250	5171A	B		123304	W015.9	5172	1305	1459	5173A	A
5172	1348	1437	5173A	B		142020	W042.7	5173	1458	1630	5173A	B
5173	1536	1624	5173A	A		160737	W069.5	5174	1632	1810	5174A	B
5174	1723	1807	5174A	B		175453	W096.3	5175	1816	1955	5175A	B
5175	1910	1956	5175A	B		194210	W123.1	5176	2003	2146	5176A	B
5176	2057	2146	5176A	B		212926	W150.0	5177	2152	2349	5180R	A
5177	2245	2333	5180R	A		231643	W176.8					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5164	0040	0117	5166R	A		005541	W021.5		0040	0224	5166R	A
5165	0206	0224	5166R	A		024258	W048.3		0225	0416	5166R	B
5165	0225	0305	5166R	B					0422	0603	5167R	B
5166	0353	0416	5166R	B		043014	W075.1		0608	0743	5168A	B
5166	0422	0452	5167R	B					0748	0929	5169A	B
5167	0540	0602	5167R	B		061731	W102.0		0934	1119	5170A	B
5167	0608	0639	5168A	B					1125	1300	5171A	B
5168	0728	0742	5168A	B		080447	W128.8		1305	1459	5173A	A
5168	0748	0826	5169A	B					1459	1631	5173A	B
5169	0915	0928	5169A	B		095204	W155.6		1632	1811	5174A	B
5169	0934	1014	5170A	B					1815	1957	5175A	B
5170	1102	1119	5170A	B		113920	E177.6		2003	2147	5176A	B
5170	1124	1201	5171A	B					2152	2349	5180R	A
5171	1250	1259	5171A	B		132637	E150.8					
5171	1305	1348	5173A	B								
5172	1437	1458	5173A	B		151353	E123.9					
5172	1458	1536	5173A	A								
5173	1632	1723	5174A	B		170110	E097.1					
5174	1816	1910	5175A	B		184826	E070.3					
5175	2003	2057	5176A	B		203543	E043.5					
5176	2152	2245	5180R	A		222259	E016.7					
5177	2333	2349	5180R	A		001015	W010.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
1 JANUARY 1974

THIR							ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE				INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
5178						010358	E156.4	5180	0320	0515	5180R	B
5179						025115	E129.6	5181	0522	0703	5181R	B
5180	0406	0455	5180R	B		043831	E102.8	5182	0709	0845	5182R	B
5181	0554	0642	5181R	B		062548	E076.0	5183	0849	1033	5183A	B
5182	0741	0830	5182A	B		081304	E049.1	5184	1039	1215	5184A	B
5183	0928	1017	5183A	B		100021	E022.3	5185	1220	1414	5186A	B
5184	1116	1204	5184A	B		114737	W004.5	5186	1414	1549	5186A	B
5185	1303	1351	5186A	B		133454	W031.3	5187	1649	1751	5187A	B
5186	1450	1539	5186A	A		152210	W058.1	5188	1735	1911	5188A	B
5187	1637	1726	5187A	B		170927	W085.0	5189	1917	2100	5189A	B
5188	1825	1911	5188A	B		185643	W111.8	5190	2105	2249	5190A	B
5189	2012	2059	5189A	B		204400	W138.6					
5190	2159	2248	5190A	B		223116	W165.4					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5178						015731	W037.0		0320	0516	5180R	B
5179	0321	0406	5180R	B		034448	W063.8		0521	0704	5181R	B
5180	0455	0515	5180R	B		053204	W090.6		0709	0845	5182R	B
5180	0521	0554	5181R	B					0849	1034	5183A	B
5181	0642	0703	5181R	B		071921	W117.4		1039	1215	5184A	B
5181	0709	0741	5182A	B					1220	1415	5186A	B
5182	0830	0844	5182A	B		090637	W144.2		1414	1550	5186A	A
5182	0849	0928	5183A	B					1549	1731	5187A	B
5183	1017	1033	5183A	B		105353	W171.1		1735	1912	5188A	B
5183	1039	1116	5184A	B					1916	2100	5189A	B
5184	1204	1214	5184A	B		124110	E162.1		2105	2249	5190A	B
5184	1220	1303	5186A	B								
5185	1351	1413	5186A	B		142826	E135.3					
5185	1414	1450	5186A	A								
5186	1539	1549	5186A	A		161543	E108.5					
5186	1550	1637	5187A	B								
5187	1735	1825	5188A	B		180259	E081.7					
5188	1916	2012	5189A	B		195016	E054.8					
5189	2105	2159	5190A	B		213732	E028.0					
5190						232449	E001.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
2 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5191						001833	E167.8					
5192	0134	0222	5193R	A		020549	E140.9	5192	0050	0241	5193R	A
5193	0321	0410	5193R	B		035305	E114.1	5193	0240	0430	5193R	B
5194	0508	0557	5194R	B		054022	E087.3	5194	0437	0617	5194R	B
5195	0656	0744	5195A	B		072738	E060.5	5195	0622	0800	5195A	B
5196	0843	0931	5196A	B		091455	E033.7	5196	0805	0945	5196A	B
5197	1030	1119	5197A	B		110211	E006.8	5197	0950	1135	5197A	B
5198	1217	1306	5199A	B		124928	W020.0	5199	1328	1504	5199A	A
5199	1405	1453	5199A	A		143644	W046.8	5200	1504	1642	5200A	B
5200	1552	1641	5200A	B		162401	W073.6	5201	1648	1826	5201A	B
5201	1739	1826	5201A	B	1W	181117	W100.4	5202	1833	2015	5202A	B
5202	1927	2015	5202A	B		195834	W127.3	5203	2021	2203	5203A	B
5203	2114	2202	5203A	B		214550	W154.1	5204	2205	0003	5207R	A
5204	2301	2350	5207R	A		233307	E179.1					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5191	0051	0134	5193R	A		011205	W025.6		0051	0241	5193R	A
5192	0222	0241	5193R	A		025922	W052.4		0241	0430	5193R	B
5192	0240	0321	5193R	B					0437	0617	5194R	B
5193	0410	0427	5193R	B		044638	W079.3		0622	0800	5195A	B
5193	0437	0508	5194R	B					0805	0945	5196A	B
5194	0557	0616	5194R	B		063355	W106.1		0950	1135	5197A	B
5194	0622	0656	5195A	B					1140	1330	5199A	B
5195	0744	0759	5195A	B		082111	W132.9		1329	1504	5199A	A
5195	0805	0843	5196A	B					1504	1643	5200A	B
5196	0931	0944	5196A	B		100828	W159.7		1648	1826	5201A	B
5196	0950	1030	5197A	B					1831	2017	5202A	B
5197	1119	1134	5197A	B		115544	E173.5		2021	2203	5203A	B
5197	1140	1217	5199A	B					2205	0002	5207R	A
5198	1306	1329	5199A	B		134301	E146.6					
5198	1329	1405	5199A	A								
5199	1453	1503	5199A	A		153017	E119.8					
5199	1504	1552	5200A	B								
5200	1648	1739	5201A	B	1E	171734	E093.0					
5201	1831	1927	5202A	B		190450	E066.2					
5202	2021	2114	5203A	B		205207	E039.4					
5203	2205	2301	5207R	A		223923	E012.5					
5204	2350	0001	5207R	A		002640	W014.3					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
3 JANUARY 1974

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
DAYTIME THIR						**ASC. NODE**						
5205						012023	E152.3	5206	0151	0348	5206R	B
5206	0236	0324	5206R	B		030740	E125.5	5207	0354	0531	5207R	B
5207	0423	0511	5207R	B		045456	E098.7	5208	0538	0712	5208A	B
5208	0610	0659	5208A	B		064213	E071.9	5209	0718	0900	5209A	B
5209	0757	0846	5209A	B		082929	E045.0	5210	0905	1045	5210A	B
5210	0945	1033	5210A	B		101646	E018.2	5211	1050	1231	5211A	B
5211	1132	1221	5211A	B		120402	W008.6	5212	1237	1430	5213A	B
5212	1319	1408	5213A	B	1S	135119	W035.4	5213	1430	1629	5214A	A
5213	1507	1555	5214A	A		153835	W062.3	5214	1605	1744	5214A	B
5214	1654	1742	5214A	B		172551	W089.1	5215	1749	1928	5215A	B
5215	1841	1927	5215A	B		191308	W115.9	5216	1933	2118	5216A	B
5216	2028	2117	5216A	B		210024	W142.7	5217	2127	2241	5217A	B
5217	2216	2303	5217A	B		224741	W169.5					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
5205	0152	0236	5206R	A		021356	W041.1		0151	0348	5206R	B
5206	0324	0347	5206R	A		040113	W067.9		0354	0532	5207R	B
5206	0354	0423	5207R	B					0536	0713	5208A	B
5207	0511	0530	5207R	B		054829	W094.7		0718	0900	5209A	B
5207	0536	0610	5208A	B					0905	1046	5210A	B
5208	0659	0712	5208A	B		073546	W121.6		1050	1232	5211A	B
5208	0718	0757	5209A	B					1237	1435	5213A	B
5209	0846	0859	5209A	B		092302	W148.4		1431	1629	5214A	A
5209	0905	0945	5210A	B					1605	1744	5214A	B
5210	1033	1045	5210A	B		111019	W175.2		1749	1928	5215A	B
5210	1050	1132	5211A	B					1933	2119	5216A	B
5211	1221	1231	5211A	B		125735	E158.0		2123	2305	5217A	B
5211	1237	1319	5213A	B	1N							
5212	1408	1432	5213A	B	1N	144452	E131.2					
5212	1431	1507	5214A	A								
5213	1555	1628	5214A	A		163208	E104.4					
5213	1606	1654	5214A	B								
5214	1749	1841	5215A	B		181925	E077.6					
5215	1933	2028	5216A	B		200641	E050.7					
5216	2124	2216	5217A	B		215358	E023.9					
5217						234114	W002.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
4 JANUARY 1974

THIR						ASC. AND		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
5218						003457	E163.7	5219	0107	0257	5220R	A
5219	0150	0239	5220R	A		022214	E136.9	5220	0253	0447	5220R	B
5220	0338	0426	5220R	B		040930	E110.0	5221	0453	0654	5222A	B
5221	0525	0613	5222A	B		055647	E083.2	5223	0821	1001	5223A	B
5222						074403	E056.4	5224	1006	1150	5224A	B
5223	0859	0948	5223A	B		093120	E029.6	5225	1155	1332	5225A	B
5224	1047	1135	5224A	B		111836	E002.8	5226	1337	1519	5226A	B
5225	1234	1322	5225A	B		130553	W024.1	5227	1524	1700	5227A	B
5226	1421	1510	5226A	B		145309	W050.9	5228	1705	1843	5228A	B
5227	1608	1657	5227A	B		164026	W077.7	5229	1849	2029	5230A	B
5228	1756	1842	5228A	B		182742	W104.5	5230	2030	2216	5230A	A
5229	1943	2029	5230A	B		201459	W131.3	5231	2221	0024	5234R	A
5230	2130	2215	5230A	A		220215	W158.2					
5231	2318	0006	5234R	A		234932	E175.0					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
5218	0107	0150	5220R	A		012831	W029.7	0107	0257	5220R	A	
5219	0239	0257	5220R	A		031547	W056.5	0254	0447	5220R	B	
5219	0253	0338	5220R	B				0453	0655	5222A	B	
5220	0426	0447	5220R	B		050303	W083.4	0821	1002	5223A	B	
5220	0453	0525	5222A	B				1007	1151	5224A	B	
5221	0613	0654	5222A	B		065020	W110.2	1155	1332	5225A	B	
5222	0821	0859	5223A	B		083736	W137.0	1337	1519	5226A	B	
5223	0948	0959	5223A	B		102453	W163.8	1524	1701	5227A	B	
5223	1007	1047	5224A	B				1705	1843	5228A	B	
5224	1135	1150	5224A	B		121209	E169.4	1847	2030	5230A	B	
5224	1156	1234	5225A	B				2030	2217	5230A	A	
5225	1322	1331	5225A	B		135926	E142.6	2222	0024	5234R	A	
5225	1337	1421	5226A	B								
5226	1510	1518	5226A	B		154642	E115.7					
5226	1524	1608	5227A	B								
5227	1705	1756	5228A	B		173359	E088.9					
5228	1848	1943	5230A	B		192115	E062.1					
5229	2032	2130	5230A	A		210832	E035.3					
5230	2222	2318	5234R	A		225548	E008.5					
5231	0006	0023	5234R	A		004305	W018.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
5 JANUARY 1974

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
5232						013648	E146.2	5233	0208	0404	5233R	B
5233	0252	0341	5233R	B		032405	E121.4	5234	0410	0548	5234R	B
5234	0439	0528	5234R	B		051121	E094.6	5235	0554	0731	5235A	B
5235	0627	0715	5235A	B		065837	E067.8	5236	0736	0917	5236A	B
5236	0814	0902	5236A	B		084554	E040.9	5237	0923	1106	5237A	B
5237	1001	1050	5237A	B		103310	E014.1	5238	1112	1249	5238A	B
5238	1148	1237	5238A	B		122027	W012.7	5239	1255	1433	5239A	B
5239	1336	1424	5239A	B		140744	W039.5	5240	1439	1617	5240A	B
5240	1523	1612	5240A	B		155500	W066.3	5241	1623	1747	5241A	B
5241	1710	1759	5241A	B		174216	W093.2	5242	1805	1943	5242A	B
5242	1858	1943	5242A	B		192933	W120.0	5243	1949	2135	5243A	B
5243	2045	2133	5243A	B		211649	W146.8	5244	2140	2321	5244A	B
5244	2232	2320	5244A	B		230406	W173.6					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5232	0207	0252	5233R	B		023021	W045.2		0207	0414	5233R	B
5233	0341	0356	5233R	B		041738	W072.0		0410	0548	5234R	B
5233	0410	0439	5234R	B					0554	0731	5235A	B
5234	0528	0548	5234R	B		060454	W098.8		0736	0918	5236A	B
5234	0554	0627	5235A	B					0923	1107	5237A	B
5235	0715	0730	5235A	B		075211	W125.6		1112	1250	5238A	B
5235	0736	0814	5236A	B					1255	1434	5239A	B
5236	0902	0917	5236A	B		093927	W152.5		1439	1618	5240A	B
5236	0923	1001	5237A	B					1623	1800	5241A	B
5237	1050	1106	5237A	B		112644	W179.3		1806	1944	5242A	B
5237	1112	1148	5238A	B					1950	2135	5243A	B
5238	1237	1249	5238A	B		131400	E153.9		2141	2322	5244A	B
5238	1255	1336	5239A	B								
5239	1424	1433	5239A	B		150117	E127.1					
5239	1439	1523	5240A	B								
5240	1612	1617	5240A	B		164833	E100.3					
5240	1623	1710	5241A	B								
5241	1806	1858	5242A	B		183550	E073.4					
5242	1949	2045	5243A	B		202306	E046.6					
5243	2140	2232	5244A	B		221023	E019.8					
5244						235739	W007.0					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
6 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5245						005122	E159.6	5246	0132	0312	5247R	A
5246	0207	0255	5247R	A		023839	E132.7	5247	0310	0506	5247R	B
5247	0354	0443	5247R	B		042555	E105.9	5248	0511	0652	5248R	B
5248	0541	0630	5248R	B		061312	E079.1	5249	0657	0831	5249A	B
5249	0729	0817	5249A	B		080028	E052.3	5250	0836	1019	5250A	B
5250	0916	1004	5250A	B		094745	E025.5	5251	1024	1159	5251A	B
5251	1103	1152	5251A	B		113501	W001.4	5252	1207	1349	5252A	B
5252	1250	1339	5252A	B		132218	W028.2	5253	1355	1534	5253A	B
5253	1438	1526	5253A	B		150934	W055.0	5254	1540	1718	5254A	B
5254	1625	1713	5254A	B		165650	W081.8	5255	1723	1902	5255A	B
5255	1812	1901	5255A	B		184407	W108.6	5256	1907	2046	5256A	B
5256	1959	2045	5256A	B		202123	W135.5	5257	2051	2237	5257A	B
5257	2147	2235	5257A	B		221840	W162.3					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5245	0128	0207	5247R	A		014456	W033.8		0133	0312	5247R	A
5246	0255	0312	5247R	A		033212	W060.7		0310	0506	5247R	B
5246	0310	0354	5247R	B					0511	0653	5248R	B
5247	0443	0505	5247R	B		051929	W087.5		0657	0832	5249A	B
5247	0511	0541	5248R	B					0837	1019	5250A	B
5248	0630	0652	5248R	B		070645	W114.3		1024	1159	5251A	B
5248	0657	0729	5249A	B					1207	1350	5252A	B
5249	0817	0831	5249A	B		085402	W141.1		1355	1535	5253A	B
5249	0836	0916	5250A	B					1540	1718	5254A	B
5250	1004	1018	5250A	B		104118	W167.9		1723	1902	5255A	B
5250	1024	1103	5251A	B					1907	2046	5256A	B
5251	1152	1201	5251A	B		122835	E165.2		2051	2238	5257A	B
5251	1207	1250	5252A	B								
5252	1339	1349	5252A	B		141551	E138.4					
5252	1355	1438	5253A	B								
5253	1526	1534	5253A	B		160308	E111.6					
5253	1540	1625	5254A	B								
5254	1723	1812	5255A	B		175024	E084.8					
5255	1907	1959	5256A	B		193741	E058.0					
5256	2051	2147	5257A	B		212457	E031.2					
5257	2237	2334	5261R	A		231213	E004.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
7 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5258	2334	0023	5261R	A		000556	E170.9	5258	2238	0035	5261R	A
5259						015313	E144.1	5260	0224	0420	5260R	B
5260	0309	0357	5260R	B		034029	E117.3	5261	0426	0605	5261R	B
5261	0456	0544	5261R	B		052746	E090.4	5262	0611	0746	5262A	B
5262	0643	0732	5262A	B		071502	E063.6	5263	0752	0933	5263A	B
5263	0830	0919	5263A	B		090219	E036.8	5264	0938	1122	5264A	B
5264	1018	1106	5264A	B		104935	E010.0	5265	1127	1305	5265A	B
5265	1205	1254	5265A	B		123652	W016.8	5266	1311	1450	5266A	B
5266	1352	1441	5266A	B		142408	W043.7	5267	1455	1633	5267A	B
5267	1540	1628	5267A	B		161125	W070.5	5268	1638	1815	5268A	B
5268	1727	1810	5268A	B		175841	W097.3	5269	1820	2002	5269A	B
5269	1914	2000	5269A	B		194558	W124.1	5270	2007	2152	5270A	B
5270	2101	2150	5270A	B		213314	W150.9					
5271						232031	W177.7					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5258	0023	0035	5261R	A		005930	W022.5		2238	0035	5261R	A
5259	0224	0309	5260R	B		024646	W049.3		0225	0421	5260R	B
5260	0357	0420	5260R	B		042403	W076.1		0426	0606	5261R	B
5260	0426	0456	5261R	B					0611	0747	5262A	B
5261	0544	0604	5261R	B		062119	W102.9		0752	0934	5263A	B
5261	0611	0643	5262A	B					0938	1123	5264A	B
5262	0732	0746	5262A	B		080836	W129.8		1127	1306	5265A	B
5262	0752	0830	5263A	B					1311	1451	5266A	B
5263	0919	0935	5263A	B		095552	W156.6		1455	1633	5267A	B
5263	0938	1018	5264A	B					1638	1815	5268A	B
5264	1106	1122	5264A	B		114309	E176.6		1820	2002	5269A	B
5264	1127	1205	5265A	B					2007	2153	5270A	B
5265	1254	1306	5265A	B		133025	E149.8					
5265	1311	1352	5266A	B								
5266	1441	1450	5266A	B		151742	E123.0					
5266	1455	1540	5267A	B								
5267	1637	1727	5268A	B		170458	E096.2					
5268	1820	1914	5269A	B		185215	E069.4					
5269	2007	2101	5270A	B		203931	E042.5					
5270						222648	E015.7					
5271						001404	W011.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
8 JANUARY 1974

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
5272						010747	E155.5	5273	0138	0328	5276A	A
5273	0223	0312	5274R	A		025504	E128.7	5274	0328	0518	5274R	B
5274	0410	0459	5274R	B		044220	E101.8	5275	0525	0707	5275R	B
5275						062936	E075.0	5276	0712	0806	5276R	B
5276	0745	0834	5276A	B		081653	E048.2	5277	0852	1034	5277A	B
5277	0932	1021	5277A	B		100409	E021.4	5278	1039	1217	5278A	B
5278	1120	1208	5278A	B		115126	W005.5	5279	1223	1404	5279A	B
5279	1307	1355	5279A	B		133842	W032.3	5280	1409	1548	5280A	B
5280	1454	1543	5280A	B		152559	W059.1	5281	1554	1731	5281A	B
5281	1641	1730	5281A	B		171315	W085.9	5282	1737	1917	5282A	B
5282						190032	W112.7	5283	1923	2105	5283A	B
5283						204748	W139.6	5284	2111	2253	5284A	B
5284	2203	2252	5284A	B		223505	W166.4					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5272	0139	0223	5274R	A		020121	W037.9		0138	0328	5274R	A
5273	0312	0328	5274R	A		034837	W064.7		0328	0518	5274R	B
5273	0329	0410	5274R	B					0525	0707	5275R	B
5274	0459	0519	5274R	B		053554	W091.6		0712	0848	5276A	B
5275	0712	0745	5276A	B		072310	W118.4		0852	1034	5277A	B
5276	0834	0846	5276A	B		091027	W145.2		1039	1218	5278A	B
5276	0852	0932	5277A	B					1223	1404	5279A	B
5277	1021	1033	5277A	B		105744	W172.0		1409	1549	5280A	B
5277	1039	1120	5278A	B					1554	1732	5281A	B
5278	1208	1217	5278A	B		124500	W161.2		1737	1917	5282A	B
5278	1223	1307	5279A	B					1923	2106	5283A	B
5279	1355	1403	5279A	B		143216	E134.3		2111	2254	5284A	B
5279	1409	1454	5280A	B								
5280	1554	1641	5281A	B		161933	E107.5					
5281						180649	E080.7					
5282						195406	E053.9					
5283	2111	2203	5284A	B		214122	E027.1					
5284	2254	2351	5287R	A		232839	E000.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
9 JANUARY 1974

THIR							ASC. AND DESC. NODE		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5285	2351	0039	5287R	A		002221	E166.8	5285	2255	0055	5287R	A
5286						020938	E140.0	5287	0244	0420	5287R	B
5287	0325	0414	5287R	B		035654	E113.2	5288	0441	0623	5288R	B
5288	0512	0601	5288R	B		054411	E086.4	5289	0628	0802	5289A	B
5289	0700	0748	5289A	B		073127	E059.5	5290	0808	0948	5290A	B
5290	0847	0935	5290A	B		091844	E032.7	5291	0954	1138	5291A	B
5291	1034	1123	5291A	B		110600	E005.9	5292	1143	1320	5292A	B
5292	1221	1310	5292A	B		125317	W020.9	5293	1327	1505	5293A	B
5293	1409	1457	5293A	B		144033	W047.7	5294	1510	1649	5294A	B
5294	1556	1645	5294A	B		162749	W074.6	5295	1654	1831	5295A	B
5295	1743	1831	5295A	B		181506	W101.4	5296	1837	2018	5296A	B
5296	1931	2018	5296A	B		200222	W128.2	5297	2024	2208	5297A	B
5297	2118	2206	5297A	B		214939	W155.0					
5298						233655	E178.2					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5285	0039	0054	5287R	A		011555	W026.6		2255	0055	5287R	A
5286	0243	0325	5287R	B		030312	W053.4					
5287	0414	0435	5287R	B		045028	W080.2		0442	0623	5288R	B
5287	0442	0512	5288R	B					0628	0803	5289A	B
5288	0601	0622	5288R	B		063745	W107.0		0807	0949	5290A	B
5088	0628	0700	5289A	B					0954	1139	5291A	B
5289	0748	0802	5289A	B		082501	W133.9		1143	1321	5292A	B
5289	0807	0847	5290A	B					1326	1506	5293A	B
5290	0935	0948	5290A	B		101218	W160.7		1510	1650	5294A	B
5290	0954	1034	5291A	B					1655	1832	5295A	B
5291	1123	1137	5291A	B		115934	W172.5		1837	2018	5296A	B
5291	1143	1221	5292A	B					2024	2207	5297A	B
5292	1310	1320	5292A	B		134651	E145.7					
5292	1326	1409	5293A	B								
5293	1457	1504	5293A	B		153407	E118.9					
5293	1510	1556	5294A	B								
5294	1655	1743	5295A	B		172123	E092.0					
5295	1837	1931	5296A	B		190840	E065.2					
5296	2024	2118	5297A	B		205556	E038.4					
5297						224313	E011.6					
5298	0009	0052	5301R	A		003029	W015.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
10 JANUARY 1974

THIR							ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE				INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
5299	0052	0141	5301R	A		012412	E151.3	5299	0009	0204	5301R	A
5300	0240	0328	5300R	B		031128	E124.5	5300	0157	0347	5300R	B
5301	0427	0516	5301R	B		045845	E097.7	5301	0359	0535	5301R	B
5302	0614	0703	5302A	B		064601	E070.9	5302	0543	0718	5302A	B
5303	0802	0850	5303A	B		083318	E044.1	5303	0723	0907	5303A	B
5304	0949	1037	5304A	B		102034	E017.2	5304	0912	1050	5304A	B
5305	1136	1225	5305A	B		120751	W009.6	5305	1056	1237	5305A	B
5306	1323	1412	5306A	B		135507	W036.4	5306	1242	1420	5306A	B
5307	1511	1559	5307A	B		154224	W063.2	5307	1426	1605	5307A	B
5308	1658	1746	5308A	B		172940	W090.0	5308	1610	1749	5308A	B
5309	1845	1930	5309A	B		191657	W116.9	5309	1754	1930	5309A	B
5310	2032	2119	5310A	B		210413	W143.7	5310	1937	2120	5310A	B
5311	2220	2308	5311A	B		225130	W170.5	5311	2124	2310	5311A	B
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5299	0141	0203	5301R	A		021746	W042.1		0009	0204	5301R	A
5299	0158	0240	5300R	B					0158	0347	5300R	B
5300	0328	0347	5300R	B		040502	W068.9		0359	0536	5301R	B
5300	0359	0427	5301R	B					0540	0718	5302A	B
5301	0516	0535	5301R	B		055219	W095.7		0723	0907	5303A	B
5301	0540	0614	5302A	B					0912	1051	5304A	B
5302	0703	0717	5302A	B		073935	W122.5		1056	1237	5305A	B
5302	0723	0802	5303A	B					1242	1420	5306A	B
5303	0850	0907	5303A	B		092652	W149.3		1425	1605	5307A	B
5303	0912	0949	5304A	B					1610	1749	5308A	B
5304	1037	1051	5304A	B		111408	W176.2		1754	1931	5309A	B
5304	1056	1136	5305A	B					1935	2120	5310A	B
5305	1225	1236	5305A	B		130125	E157.0		2124	2310	5311A	B
5305	1242	1323	5306A	B								
5306	1412	1420	5306A	B		144841	E130.2					
5306	1425	1511	5307A	B								
5307	1610	1658	5308A	B		163558	E103.4					
5308	1754	1845	5309A	B		182314	E076.6					
5309	1936	2032	5310A	B		201031	E049.8					
5310	2125	2220	5311A	B		215747	E023.0					
5311	2311	0007	5314R	A		234504	W003.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
11 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5312	0007	0056	5314R	A		003846	E162.7	5312	2311	0108	5314R	A
5313						022603	E135.9	5314	0258	0452	5314R	B
5314	0342	0430	5314R	B		041319	E109.1	5315	0457	0640	5315R	B
5315	0529	0617	5315R	B		060035	E082.2	5316	0645	0817	5316A	B
5316	0716	0805	5316A	B		074752	E055.4	5317	0822	1005	5317A	B
5317	0903	0952	5317A	B		093508	E028.6	5318	1011	1147	5318A	B
5318	1051	1139	5318A	B		112225	E001.8	5319	1155	1337	5319A	B
5319	1238	1327	5319A	B		130941	W025.1	5320	1342	1520	5320A	B
5320	1425	1514	5320A	B		145658	W051.9	5321	1526	1702	5321A	B
5321	1612	1701	5321A	B		164414	W078.7	5322	1708	1850	5322A	B
5322	1800	1848	5322A	B		183131	W105.5	5323	1854	2030	5323A	B
5323	1947	2034	5323A	B		201847	W132.3	5324	2041	2224	5324A	B
5324	2134	2223	5324A	B		220604	W159.1					
5325						235320	W174.1					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5312	0056	0108	5314R	A		013220	W030.7		2311	0108	5314R	A
5313	0258	0342	5314B	B		031937	W057.5		0258	0451	5314R	B
5314	0430	0450	5314R	B		050653	W084.4		0456	0640	5315R	B
5314	0457	0529	5315R	B					0646	0818	5316R	B
5315	0617	0640	5315R	B		065410	W111.2		0822	1006	5317A	B
5315	0646	0716	5316A	B					1011	1148	5318A	B
5316	0805	0817	5316A	B		084126	W138.0		1154	1337	5319A	B
5316	0822	0903	5317A	B					1342	1521	5320A	B
5317	0952	1005	5317A	B		102843	W164.8		1526	1702	5321A	B
5317	1011	1051	5318A	B					1706	1849	5322A	B
5318	1139	1148	5318A	B		121559	E168.4		1854	2035	5323A	B
5318	1154	1238	5319A	B					2041	2224	5324A	B
5319	1327	1336	5319A	B		140316	E141.6					
5319	1342	1425	5320A	B								
5320	1514	1520	5320A	B		155032	E114.8					
5320	1526	1612	5321A	B								
5321	1707	1800	5322A	B		173749	E088.0					
5322	1854	1947	5323A	B		192505	E061.1					
5323	2041	2134	5324A	B		211222	E034.3					
5324						225938	E007.5					
5325	0025	0109	5328R	A		004654	W019.3					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
12 JANUARY 1974

THIR							ASC. AND		ESMR			
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR		DESC. NODE				INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR						ASC. NODE						
5326	0109	0157	5328R	A			014037	E147.2	5326	0025	0220	5328R	A
5327	0256	0345	5327R	B			032753	E120.4	5327	0214	0408	5327R	B
5328	0443	0532	5328R	B			051510	E093.6	5328	0414	0551	5328R	B
5329	0631	0719	5329A	B			070226	E066.8	5329	0558	0733	5329A	B
5330	0818	0907	5330A	B			084943	E040.0	5330	0738	0920	5330A	B
5331	1005	1054	5331A	B			103659	E013.2	5331	0925	1111	5331A	B
5332	1153	1241	5332A	B			122416	W013.7	5332	1117	1254	5332A	B
5333	1340	1428	5333A	B			141132	W040.5	5333	1300	1439	5333A	B
5334	1527	1616	5334A	B			155848	W067.3	5334	1444	1620	5334A	B
5335	1714	1803	5335A	B			174605	W094.1	5335	1627	1805	5335A	B
5336	1902	1947	5336A	B			193321	W120.9	5336	1810	1948	5336A	B
5337	2049	2138	5337A	B			212038	W147.8	5337	1953	2138	5337A	B
5338							230754	W174.6					
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
5326	0157	0220	5328R	A			023411	W046.2	0025	0220	5328R	A	
5326	0214	0256	5327R	B					0214	0408	5327R	B	
5327	0345	0406	5327R	B			042127	W073.0	0414	0551	5328R	B	
5327	0414	0443	5328R	B					0558	0734	5329A	B	
5328	0532	0550	5328R	B			060844	W099.8	0738	0920	5330A	B	
5328	0558	0631	5329A	B					0924	1112	5331A	B	
5329	0719	0733	5329A	B			075600	W126.6	1117	1255	5332A	B	
5329	0738	0818	5330A	B					1300	1439	5333A	B	
5330	0907	0919	5330A	B			094317	W153.4	1444	1621	5334A	B	
5330	0924	1005	5331A	B					1627	1805	5335A	B	
5331	1054	1111	5331A	B			113033	W179.8	1810	1948	5336A	B	
5331	1117	1153	5332A	B					1953	2138	5337A	B	
5332	1241	1254	5332A	B			131750	E152.9					
5332	1300	1340	5333A	B									
5333	1428	1438	5333A	B			150506	E126.1					
5333	1444	1527	5334A	B									
5334	1626	1714	5335A	B			165223	E099.3					
5335	1810	1902	5336A	B			183939	E072.5					
5336	1953	2049	5337A	B			202656	E045.7					
5337							221412	E018.8					
5338	2327	0023	5341R	A			000129	W008.0					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
13 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
5339	0023	0112	5341R	A		005511	E158.6	5339	2327	0124	5341R	A
5340						024227	E131.8	5341	0314	0505	5341R	B
5341	0358	0447	5341R	B		042944	E105.0	5342	0513	0655	5342R	B
5342	0545	0634	5342R	B		061700	E078.1	5343	0700	0836	5343A	B
5343	0733	0821	5343A	B		080417	E051.3	5344	0841	1022	5344A	B
5344	0920	1008	5344A	B		095133	E024.5	5345	1028	1207	5345A	B
5345	1107	1156	5345A	B		113850	W002.3	5346	1213	1354	5346A	B
5346	1254	1343	5346A	B		132606	W029.1	5347	1358	1536	5347A	B
5347	1442	1530	5347A	B		151323	W056.0	5348	1541	1720	5348A	B
5348	1629	1718	5348A	B		170039	W082.8	5349	1725	1903	5349A	B
5349	1816	1902	5349A	B		184756	W109.6	5350	1908	2050	5350A	B
5350	2004	2050	5350A	B		203512	W136.4	5351	2055	2240	5351A	B
5351	2151	2239	5351A	B		222229	W163.2					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
5339	0112	0124	5341R	A		014845	W034.8	2327	0124	5341R	A	
5340	0314	0358	5341R	B		033602	W061.6	0314	0506	5341R	B	
5341	0447	0505	5341R	B		052318	W088.4	0511	0655	5342R	B	
5341	0511	0545	5342R	B				0700	0836	5343A	B	
5342	0634	0654	5342R	B		071035	W115.3	0841	1023	5344A	B	
5342	0700	0733	5343A	B				1028	1208	5345A	B	
5343	0821	0836	5343A	B		085751	W142.1	1213	1354	5346A	B	
5343	0841	0920	5344A	B				1359	1536	5347A	B	
5344	1008	1022	5344A	B		104508	W168.9	1541	1720	5348A	B	
5344	1028	1107	5345A	B				1725	1903	5349A	B	
5345	1156	1207	5345A	B		123224	E164.3	1907	2051	5350A	B	
5345	1213	1254	5346A	B				2055	2240	5351A	B	
5346	1343	1352	5346A	B		141941	E137.5					
5346	1358	1442	5347A	B								
5347	1530	1535	5347A	B		160657	E110.7					
5347	1541	1629	5348A	B								
5348	1725	1816	5349A	B		175414	E083.8					
5349	1907	2004	5350A	B		194130	E057.0					
5350	2055	2151	5351A	B		212847	E030.2					
5351						231603	E003.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
14 JANUARY 1974

THIR							ASC. AND DESC. NODE		ESMR				
	11.5 + 6.7		INT ORBIT +	H D R	THIR GRID CORR		TIME	LONG				INT ORBIT +	H D R
DATA ORBIT	ON HRMN	OFF HRMN	STDN	S	LALO		HRMNSS	DEG	DATA ORBIT	ON HRMN	OFF HRMN	STDN	S
	DAYTIME THIR						ASC. NODE						
5352							000945	E170.0	5353	0047	0235	5354R	A
5353	0125	0214	5354R	A			015701	E143.1	5354	0228	0424	5354R	B
5354	0313	0401	5354R	B			034418	E116.3	5355	0428	0611	5355R	B
5355	0500	0549	5355R	B			053134	E089.5	5356	0617	0750	5356A	B
5356	0647	0736	5356A	B			071851	E062.7	5357	0755	0936	5357A	B
5357	0834	0923	5357A	B			090607	E035.9	5358	0941	1126	5358A	B
5358	1022	1110	5358A	B			105324	E009.0	5359	1131	1309	5359A	B
5359	1209	1258	5359A	B			124040	W017.8	5360	1314	1454	5360A	B
5360	1356	1445	5360A	B			142757	W044.6	5361	1459	1636	5361A	B
5361	1544	1632	5361A	B			161513	W071.4	5362	1642	1818	5362A	B
5362	1731	1818	5362A	B			180230	W098.2	5363	1824	2004	5363A	B
5363	1918	2004	5363A	B			194946	W125.1	5364	2010	2152	5364A	B
5364	2105	2152	5364A	B			213703	W151.9					
5365							232419	W178.7					
	NIGHTTIME THIR						DESC. NODE			NEMS - SCR - ITPR			
5352	0042	0125	5354R	A			010320	W023.5		0042	0234	5354R	A
5353	0214	0234	5354R	A			025036	W050.3		0228	0423	5354R	B
5353	0227	0313	5354R	B						0428	0612	5355R	B
5354	0401	0422	5354R	B			043753	W077.1		0617	0750	5356A	B
5354	0426	0500	5355R	B						0755	0937	5357A	B
5355	0549	0610	5355R	B			062509	W103.9		0942	1127	5358A	B
5355	0617	0647	5356A	B						1131	1309	5359A	B
5356	0736	0749	5356A	B			081226	W130.7		1314	1454	5360A	B
5356	0755	0834	5357A	B						1459	1637	5361A	B
5357	0923	0936	5357A	B			095942	W157.6		1642	1819	5362A	B
5357	0942	1022	5358A	B						1824	2004	5363A	B
5358	1110	1126	5358A	B			114658	E175.7		2010	2153	5364A	B
5358	1131	1209	5359A	B									
5359	1258	1308	5359A	B			133415	E148.9					
5359	1314	1356	5360A	B									
5360	1445	1453	5360A	B			152131	E122.0					
5360	1459	1544	5361A	B									
5361	1642	1731	5362A	B			170848	E095.2					
5362	1824	1918	5363A	B			185604	E068.4					
5363	2009	2105	5364A	B			204321	E041.6					
5364							223037	E014.8					
5365	2357	0040	5370A	A			001754	W012.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
15 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5366	0040	0129	5370A	A		011136	E154.5	5366	2357	0151	5370A	A
5367						025852	E127.7	5368	0344	0526	5368R	B
5368	0415	0503	5368R	B		044609	E100.9	5369	0524	0710	5369R	B
5369	0602	0650	5369R	B		063325	E074.0	5370	0716	0850	5370A	B
5370	0749	0838	5370A	B		082042	E047.2	5371	0855	1039	5371A	B
5371	0936	1025	5371A	B		100758	E020.4	5372	1045	1220	5372A	B
5372	1124	1212	5372A	B		115514	W006.4	5373	1227	1409	5373A	B
5373	1311	1400	5373A	B		134231	W033.3	5374	1414	1552	5374A	B
5374	1458	1547	5374A	B		152947	W060.1	5375	1556	1738	5375A	B
5375	1646	1734	5375A	B		171704	W086.9	5376	1744	1919	5376A	B
5376	1833	1919	5376A	B		190420	W113.7	5377	1925	2109	5377A	B
5377	2020	2108	5377A	B		205137	W140.5	5378	2114	2315	5381R	A
5378	2207	2256	5381R	B		223853	W167.3					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5366	0129	0152	5370A	A		020510	W038.9		2356	0152	5370A	A
5367	0344	0415	5368R	B		035227	W065.7		0344	0527	5368R	B
5368	0503	0526	5368R	B		053943	W092.5		0534	0711	5369R	B
5368	0534	0602	5369R	B					0716	0851	5370A	B
5369	0650	0710	5369R	B		072700	W119.4		0855	1039	5371A	B
5369	0717	0749	5370A	B					1044	1222	5372A	B
5370	0838	0850	5370A	B		091416	W146.2		1226	1409	5373A	B
5370	0855	0936	5371A	B					1414	1552	5374A	B
5371	1025	1038	5371A	B		110133	W173.0		1556	1739	5375A	B
5371	1045	1124	5372A	B					1743	1920	5376A	B
5372	1212	1221	5372A	B		124849	E160.2		1924	2103	5377A	B
5372	1226	1311	5373A	B					2114	2316	5381R	A
5373	1400	1408	5373A	B		143606	E133.4					
5373	1414	1458	5374A	B								
5374	1556	1646	5375A	B		162322	E106.6					
5375	1744	1833	5376A	B		181039	E079.7					
5376	1924	2020	5377A	B		195755	E052.9					
5377	2114	2207	5381R	B		214512	E026.1					
5378	2256	2315	5381R	B		233228	W000.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
16 JANUARY 1974

THIR							ASC. AND		ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID		DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR						ASC. NODE						
5379							022610	E165.9	5380	0058	0249	5381R	B
5380	0142	0230	5381R	A			021326	E139.1	5382	0450	0628	5382R	B
5381							040043	E112.2	5383	0634	0805	5383A	B
5382	0516	0605	5382R	B			054759	E085.4	5384	0811	0953	5384A	B
5383	0704	0752	5383A	B			073516	E058.6	5385	0958	1143	5385A	B
5384	0851	0940	5384A	B			092232	E031.8	5386	1149	1324	5386A	B
5385	1038	1127	5385A	B			110949	E005.0	5387	1329	1508	5387A	B
5386	1226	1314	5386A	B			125705	W021.9	5388	1513	1650	5388A	B
5387	1413	1501	5387A	B			144422	W048.7	5389	1656	1834	5389A	B
5388	1600	1649	5388A	B			163138	W075.5	5390	1840	2021	5390A	B
5389	1747	1833	5389A	B			181854	W102.3	5391	2027	2211	5391A	B
5390	1935	2020	5390A	B			200611	W129.1	5392	2217	0010	5395R	A
5391	2122	2208	5391A	B			215327	W156.0					
5392	2309	2358	5395R	A			234044	E177.2					
	NIGHTTIME THIR						DESC. NODE			NEMS - SCR - ITPR			
5379	0058	0142	5381R	A			011945	W027.5		0058	0249	5381R	B
5380	0230	0249	5381R	A			030701	W054.4		0450	0628	5382R	B
5381	0450	0516	5382R	B			045418	W081.2		0634	0806	5383A	B
5382	0605	0628	5382R	B			064134	W108.0		0811	0954	5384A	B
5382	0634	0704	5383A	B						0958	1143	5385A	B
5383	0752	0806	5383A	B			082851	W134.8		1149	1324	5386A	B
5383	0811	0851	5384A	B						1329	1506	5387A	B
5384	0940	0953	5384A	B			101607	W161.6		1513	1651	5388A	B
5384	0959	1038	5385A	B						1656	1834	5389A	B
5385	1127	1142	5385A	B			120324	E171.5		1839	2021	5390A	B
5385	1149	1226	5386A	B						2027	2212	5391A	B
5386	1314	1322	5386A	B			135040	E144.7		2212	0010	5395R	A
5386	1329	1413	5387A	B									
5387	1501	1508	5387A	B			153756	E117.9					
5387	1513	1600	5388A	B									
5388	1656	1747	5389A	B			172513	E091.1					
5389	1839	1935	5390A	B			191229	E064.3					
5390	2027	2122	5391A	B			205946	E037.5					
5391	2213	2309	5395R	A			224702	E010.6					
5392	2358	0005	5395R	A			003419	W016.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
17 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5393						012800	E150.4	5394	0158	0400	5395R	B
5394	0244	0332	5395R	B		031517	E123.6	5396	0545	0722	5396A	B
5395						050233	E096.8	5397	0727	0909	5397A	B
5396	0618	0707	5396A	B		064950	E069.9	5398	0915	1056	5398A	B
5397	0806	0854	5397A	B		083706	E043.1	5399	1102	1237	5399A	B
5398	0953	1042	5398A	B		102423	E016.3	5400	1243	1424	5400A	B
5399	1140	1229	5399A	B		121139	W010.5	5401	1429	1608	5401A	B
5400	1327	1416	5400A	B		135856	W037.3	5402	1613	1751	5402A	B
5401	1515	1603	5401A	B		154612	W064.2	5403	1757	1936	5403A	B
5402	1702	1750	5402A	B		173329	W091.0	5404	1942	2124	5404A	B
5403	1849	1935	5403A	B		192045	W117.8	5405	2130	2313	5405A	B
5404	2037	2124	5404A	B		210802	W144.6					
5405	2224	2312	5405A	B		225518	W171.4					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5393	0159	0244	5395R	B		022135	W043.0		0158	0400	5395R	B
5394	0332	0400	5395R	B		040852	W069.8		0545	0722	5396A	B
5395	0545	0618	5396A	B		055608	W096.7		0727	0910	5397A	B
5396	0707	0721	5396A	B		074325	W123.5		0915	1056	5398A	B
5396	0727	0806	5397A	B					1101	1238	5399A	B
5397	0854	0909	5397A	B		093041	W150.3		1242	1424	5400A	B
5397	0915	0953	5398A	B					1429	1608	5401A	B
5398	1042	1055	5398A	B		111758	W177.1		1613	1752	5402A	B
5398	1101	1140	5399A	B					1757	1936	5403A	B
5399	1229	1237	5399A	B		130514	E156.1		1942	2125	5404A	B
5399	1242	1327	5400A	B					2131	2314	5405A	B
5400	1416	1423	5400A	B		145231	E129.3					
5400	1429	1515	5401A	B								
5401	1613	1712	5402A	B		163947	E102.5					
5402	1757	1849	5403A	B		182704	E075.7					
5403	1942	2037	5404A	B		201420	E048.8					
5404	2131	2224	5405A	B		220137	E022.0					
5405						234853	W004.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
18 JANUARY 1974

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
5406						004235	E161.7	5407	0114	0305	5408R	A
5407	0158	0247	5408R	A		022951	E134.9	5408	0302	0455	5408R	B
5408	0346	0434	5408R	B		041707	E108.1	5409	0500	0642	5409R	B
5409	0533	0622	5409R	B		060424	E081.3	5410	0650	0823	5410A	B
5410	0720	0809	5410A	B		075140	E054.5	5411	0828	1009	5411A	B
5411	0908	0956	5411A	B		093857	E027.7	5412	1015	1156	5412A	B
5412	1055	1143	5412A	B		112613	E000.8	5413	1202	1340	5413A	B
5413	1242	1331	5413A	B		131330	W026.0	5414	1345	1525	5414A	B
5414	1429	1518	5414A	B		150046	W052.8	5415	1530	1710	5415A	B
5415	1617	1705	5415A	B		164803	W079.6	5416	1715	1850	5416A	B
5416	1804	1849	5416A	B		183519	W106.5	5417	1856	2040	5417A	B
5417	1951	2040	5417A	B		202236	W133.3	5418	2046	2229	5418A	B
5418	2139	2227	5418A	B		220952	W160.1	5419	2229	0027	5421R	A
5419	2326	0014	5421R	A		235709	E173.1					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5406	0114	0158	5408R	A		013610	W031.6		0114	0306	5408R	A
5407	0247	0305	5408R	A		032326	W058.4		0302	0455	5408R	B
5407	0302	0346	5408R	B					0500	0643	5409R	B
5408	0434	0454	5408R	B		051043	W085.3		0650	0823	5410A	B
5408	0500	0533	5409R	B					0828	1010	5411A	B
5409	0622	0643	5409R	B		065759	W112.1		1014	1158	5412A	B
5409	0650	0720	5410A	B					1202	1340	5413A	B
5410	0809	0823	5410A	B		084516	W138.9		1344	1525	5414A	B
5410	0829	0908	5411A	B					1530	1710	5415A	B
5411	0956	1009	5411A	B		103232	W165.7		1715	1850	5416A	B
5411	1015	1055	5412A	B					1855	2041	5417A	B
5412	1143	1157	5412A	B		121949	E167.5		2046	2229	5418A	B
5412	1203	1242	5413A	B					2228	0027	5421R	A
5413	1331	1339	5413A	B		140705	E140.6					
5413	1344	1429	5414A	B								
5414	1518	1525	5414A	B		155422	E113.8					
5414	1530	1617	5415A	B								
5415	1715	1804	5416A	B		174138	E087.0					
5416	1855	1951	5417A	B		192854	E060.2					
5417	2046	2139	5418A	B		211611	E033.4					
5418	2229	2326	5421R	A		230327	E006.5					
5419	0014	0027	5421R	A		005044	E020.3					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
19 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5420						014425	E146.3	5421	0215	0411	5421R	B
5421	0300	0349	5421R	B		033142	E119.5	5422	0417	0555	5422R	B
5422	0448	0536	5422R	B		051858	E092.6	5423	0601	0737	5423A	B
5423	0635	0723	5423A	B		070615	E065.8	5424	0743	0925	5424A	B
5424	0822	0911	5424A	B		085331	E039.0	5425	0931	1107	5425A	B
5425	1009	1058	5425A	B		104047	E012.2	5426	1114	1255	5426A	B
5426	1157	1245	5426A	B		122804	W014.7	5427	1301	1441	5427A	B
5427	1344	1433	5427A	B		141520	W041.5	5428	1445	1624	5428A	B
5428	1531	1620	5428A	B		160237	W068.3	5429	1629	1808	5429A	B
5429	1719	1807	5429A	B		174953	W095.1	5430	1813	1954	5430A	B
5430	1906	1954	5430A	B		193710	W121.9	5431	1959	2140	5431A	B
5431	2053	2139	5431A	B		212426	W148.7					
5432						231143	W175.5					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5420	0216	0300	5421R	B		023800	W047.1		0215	0411	5421R	B
5421	0349	0411	5421R	B		042517	W073.9		0417	0555	5422R	B
5421	0417	0448	5422R	B					0557	0738	5423A	B
5422	0536	0554	5422R	B		061233	W100.7		0743	0926	5424A	B
5422	0601	0635	5423A	B					0931	1108	5425A	B
5423	0723	0737	5423A	B		075950	W127.6		1112	1256	5426A	B
5423	0743	0822	5424A	B					1301	1442	5427A	B
5424	0911	0925	5424A	B		094706	W154.4		1446	1624	5428A	B
5424	0931	1009	5425A	B					1629	1809	5429A	B
5425	1058	1107	5425A	B		113423	E178.8		1813	1955	5430A	B
5425	1113	1157	5426A	B					1959	2140	5431A	B
5426	1245	1255	5426A	B		132139	E152.0					
5426	1301	1344	5427A	B								
5427	1433	1440	5427A	B		150856	E125.2					
5427	1447	1531	5428A	B								
5428	1629	1719	5429A	B		165612	E098.3					
5429	1813	1906	5430A	B		184329	E071.5					
5430	1959	2053	5431A	B		203045	E044.7					
5431						221802	E017.9					
5432						000518	W008.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
20 JANUARY 1974

THIR							ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE				INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
5433						005859	E157.7	5434	0131	0315	5435R	A
5434	0215	0304	5435R	A		024616	E130.8	5435	0318	0510	5435R	B
5435	0402	0451	5435R	B		043332	E104.0	5436	0513	0701	5436R	B
5436	0550	0638	5436R	B		062049	E077.2	5437	0707	0838	5437A	B
5437	0737	0825	5437A	B		080805	E050.4	5438	0843	1028	5438A	B
5438	0924	1013	5438A	B		095522	E023.6	5439	1033	1210	5439A	B
5439	1111	1200	5439A	B		114238	W003.3	5440	1215	1358	5440A	B
5440	1259	1347	5440A	B		132955	W030.1	5441	1403	1541	5441A	B
5441	1446	1534	5441A	B		151711	W056.9	5442	1545	1724	5442A	B
5442	1633	1722	5442A	B		170428	W083.7	5443	1729	1906	5443A	B
5443	1820	1906	5443A	B		185144	W110.5	5444	1912	2056	5444A	B
5444	2008	2056	5444A	B		203900	W137.4	5445	2102	2245	5445A	B
5445	2155	2244	5445A	B		222617	W164.2					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5433	0131	0215	5435R	A		015235	W035.8		0131	0315	5435R	A
5434	0304	0318	5435R	A		033951	W062.6		0318	0511	5435R	B
5434	0319	0402	5435R	B					0516	0702	5436R	B
5435	0451	0510	5435R	B		052708	W089.4		0707	0839	5437A	B
5435	0516	0550	5436R	B					0843	1029	5438A	B
5436	0638	0700	5436R	B		071424	W116.2		1033	1211	5439A	B
5436	0707	0737	5437A	B					1216	1358	5440A	B
5437	0825	0838	5437A	B		090141	W143.0		1403	1541	5441A	B
5437	0843	0924	5438A	B					1546	1724	5442A	B
5438	1013	1028	5438A	B		104857	W169.9		1729	1906	5443A	B
5438	1033	1111	5439A	B					1911	2058	5444A	B
5439	1200	1211	5439A	B		123614	E163.3		2102	2244	5445A	B
5439	1216	1259	5440A	B								
5440	1347	1357	5440A	B		142330	E136.5					
5440	1403	1446	5441A	B								
5441	1534	1540	5441A	B		161047	E109.7					
5441	1546	1633	5442A	B								
5442	1729	1820	5443A	B		175803	E082.9					
5443	1911	2008	5444A	B		194520	E056.0					
5444	2102	2155	5445A	B		213236	E029.2					
5445	2246	2342	5448R	A		231952	E002.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
21JANUARY 1974

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5446	2342	0031	5448R	A		011333	E169.0	5446	2245	0042	5448R	A
5447						020050	E142.2	5448	0232	0426	5448R	B
5448	0317	0405	5448R	B		034806	E115.4	5449	0432	0613	5449R	B
5449	0504	0553	5449R	B		053523	E088.5	5450	0619	0753	5450A	B
5450	0651	0740	5450A	B		072239	E061.7	5451	0758	0940	5451A	B
5451	0839	0927	5451A	B		090956	E034.9	5452	0945	1123	5452A	B
5452	1026	1115	5452A	B		105712	E008.1	5453	1130	1311	5453A	B
5453	1213	1302	5453A	B		124429	W018.7	5454	1316	1456	5454A	B
5454	1401	1449	5454A	B		143145	W045.6	5455	1501	1640	5455A	B
5455	1548	1636	5455A	B		161902	W072.4	5456	1645	1824	5456A	B
5456	1735	1823	5456A	B		180618	W099.2	5457	1829	2007	5457A	B
5457	1922	2009	5457A	B		195335	W126.0	5458	2014	2200	5458A	B
5458	2110	2158	5458A	B		214051	W152.8					
5459						232808	W179.7					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5446	0031	0043	5448R	A		010709	W024.4		2246	0042	5448R	A
5447	0231	0317	5448R	B		025425	W051.2		0231	0426	5448R	B
5448	0405	0426	5448R	B		044142	W078.1		0432	0614	5449R	B
5448	0431	0504	5449R	B					0619	0753	5450A	B
5449	0553	0613	5449R	B		062858	W104.9		0758	0941	5451A	B
5449	0619	0651	5450A	B					0946	1124	5452A	B
5450	0740	0752	5450A	B		081615	W131.7		1129	1312	5453A	B
5450	0758	0839	5451A	B					1316	1456	5454A	B
5451	0927	0940	5451A	B		100331	W158.5		1501	1640	5455A	B
5451	0946	1026	5452A	B					1645	1824	5456A	B
5452	1115	1123	5452A	B		115048	E174.7		1829	2008	5457A	B
5452	1129	1213	5453A	B					2014	2200	5458A	B
5453	1302	1311	5453A	B		133804	E147.9					
5453	1317	1401	5454A	B								
5454	1449	1455	5454A	B		152521	E121.1					
5454	1501	1548	5455A	B								
5455	1645	1735	5456A	B		171237	E094.2					
5456	1829	1922	5457A	B		185954	E067.4					
5457	2014	2110	5458A	B		204710	E040.6					
5458						223427	E013.8					
5459	0001	0044	5462R	A		002143	W013.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
22 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
5460	0044	0133	5462R	A		011524	E153.5	5460	0002	0155	5462R	A
5461	0231	0320	5461R	B		030241	E126.7	5461	0147	0343	5461R	B
5462	0419	0507	5462R	B		044957	E099.9	5462	0349	0528	5462R	B
5463	0606	0655	5463R	B		063713	E073.1	5463	0533	0714	5463R	B
5464	0753	0842	5464A	B		082430	E046.3	5464	0720	0855	5464A	B
5465	0941	1029	5465A	B		101146	E019.4	5465	0900	1045	5465A	B
5466	1128	1216	5466A	B		115903	W007.4	5466	1050	1227	5466A	B
5467	1315	1404	5467A	B		134619	W034.2	5467	1232	1412	5467A	B
5468	1502	1551	5468A	B		153336	W061.0	5468	1418	1555	5468A	B
5469	1650	1738	5469A	B		172052	W087.8	5469	1559	1740	5469A	B
5470	1837	1917	5470A	B		190809	W114.7	5470	1745	1923	5470A	B
5471	2024	2113	5471A	B		205525	W141.5	5471	1929	2114	5471A	B
5472	2212	2300	5472A	B		224242	W168.3	5472	2120	2301	5472A	B
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
5460	0133	0155	5462R	A		020900	W039.9		0000	0156	5462R	A
5460	0146	0231	5461R	B					0146	0343	5461R	B
5461	0320	0343	5461R	B		035616	W066.7		0349	0527	5462R	B
5461	0349	0419	5462R	B					0532	0715	5463R	B
5462	0507	0526	5462R	B		054333	W093.5		0720	0856	5464A	B
5462	0532	0606	5463R	B					0900	1046	5465A	B
5463	0655	0714	5463R	B		073049	W120.3		1050	1227	5466A	B
5463	0720	0753	5464A	B					1232	1413	5467A	B
5464	0842	0855	5464A	B		091806	W147.1		1418	1555	5468A	B
5464*	0915	0941	5465A	B					1559	1740	5469A	B
5465	1029	1045	5465A	B		110522	W173.9		1745	1924	5470A	B
5465	1050	1128	5466A	B					1928	2114	5471A	B
5466	1216	1226	5466A	B		125239	E159.2		2119	2301	5472A	B
5466	1232	1315	5467A	B								
5467	1404	1412	5467A	B		143955	E132.4					
5467	1418	1502	5468A	B								
5468	1601	1650	5469A	B		162712	E105.6					
5469	1745	1837	5470A	B		181428	E078.8					
5470	1928	2024	5471A	B		200145	E052.0					
5471	2120	2212	5472A	B		214901	E025.1					
5472	2302	2359	5474R	A		233618	W001.7					
*6.7 DATA TIME DIFFERENCE												
5464	0900	0941	5465A	B								

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
23 JANUARY 1974

THIR							ASC. AND DESC. NODE		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR						ASC. NODE						
5473	2359	0047	5475R	A			002958	E164.9	5473	2302	0100	5475R	A
5474							021715	E138.1	5475	0248	0442	5475R	B
5475	0333	0422	5475R	B			040431	E111.3	5476	0448	0631	5476R	B
5476	0521	0609	5476R	B			055148	E084.5	5477	0636	0811	5477A	B
5477	0708	0757	5477A	B			073904	E057.6	5478	0817	0957	5478A	B
5478	0855	0944	5478A	B			092621	E030.8	5479	1002	1141	5479A	B
5479	1042	1131	5479A	B			111337	E004.0	5480	1146	1327	5480A	B
5480	1230	1318	5480A	B			130053	W022.9	5481	1333	1514	5481A	B
5481	1417	1506	5481A	B			144810	W049.7	5482	1518	1654	5482A	B
5482	1604	1653	5482A	B			163526	W076.5	5483	1700	1839	5483A	B
5483	1752	1839	5483A	B			182243	W103.3	5484	1844	2026	5484A	B
5484	1939	2022	5484A	B			200959	W130.1	5485	2032	2215	5485A	B
5485	2126	2215	5485A	B			215716	W156.9					
5486							234432	E176.3					
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
5473	0047	0059	5475R	A			012334	W028.5	2302	0059	5475R	A	
5474	0249	0333	5475R	B			031050	W055.3	0248	0443	5475R	B	
5475	0422	0442	5475R	B			045807	W082.1	0448	0631	5476R	B	
5475	0448	0521	5476R	B					0636	0812	5477A	B	
5476	0609	0630	5476R	B			064523	W109.0	0817	0957	5478A	B	
5476	0636	0708	5477A	B					1002	1142	5479A	B	
5477	0757	0810	5477A	B			083240	W135.8	1146	1327	5480A	B	
5477	0817	0855	5478A	B					1332	1513	5481A	B	
5478	0944	0956	5478A	B			101956	W162.6	1518	1655	5482A	B	
5478	1002	1042	5479A	B					1700	1840	5483A	B	
5479	1131	1141	5479A	B			120713	E170.6	1844	2026	5484A	B	
5479	1146	1230	5480A	B					2032	2216	5485A	B	
5480	1318	1327	5480A	B			135429	E143.8					
5480	1333	1417	5481A	B									
5481	1506	1512	5481A	B			154146	E116.9					
5481	1518	1604	5482A	B									
5482	1700	1752	5483A	B			172902	E090.1					
5483	1844	1939	5484A	B			191619	E063.3					
5484	2032	2126	5485A	B			210335	E036.5					
5485							225052	E009.7					
5486	0017	0101	5489R	A			003808	W017.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
24 JANUARY 1974

THIR							ASC. AND DESC. NODE		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5487	0101	0149	5489R	A		013149	E149.4	5487	0017	0211	5489R	A
5488	0248	0337	5488R	B		031905	E122.6	5488	0203	0400	5488R	B
5489	0435	0524	5489R	B		050622	E095.8	5489	0405	0547	5489R	B
5490	0623	0711	5490A	B		065338	E069.0	5490	0554	0725	5490A	B
5491	0810	0858	5491A	B		084055	E042.2	5491	0730	0912	5491A	B
5492	0957	1046	5492A	B		102811	E015.4	5492	0917	1103	5492A	B
5493	1144	1233	5493A	B		121528	W011.5	5493	1108	1242	5493A	B
5494	1332	1420	5494A	B		140244	W038.3	5494	1248	1430	5494A	B
5495	1519	1608	5495A	B		155001	W065.1	5495	1435	1612	5495A	B
5496	1706	1755	5496A	B		173717	W091.9	5496	1617	1757	5496A	B
5497	1854	1939	5497A	B		192434	W118.7	5497	1801	1940	5497A	B
5498	2041	2127	5498A	B		211150	W145.6	5498	1945	2127	5498A	B
5499	2228	2317	5499A	B		225906	W172.4	5499	2133	2319	5499A	B
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5487	0149	0210	5489R	A		022525	W044.0		0016	0211	5489R	A
5487	0203	0248	5488R	B					0202	0400	5488R	B
5488	0337	0357	5488R	B		041241	W070.8		0405	0548	5489R	B
5488	0405	0435	5489R	B					0554	0726	5490A	B
5489	0524	0544	5489R	B		055958	W097.6		0730	0912	5491A	B
5489	0554	0623	5490A	B					0917	1103	5492A	B
5490	0711	0725	5490A	B		074714	W124.4		1108	1243	5493A	B
5490	0730	0810	5491A	B					1248	1430	5494A	B
5491	0858	0911	5491A	B		093431	W151.3		1435	1612	5495A	B
5491	0917	0957	5492A	B					1617	1756	5496A	B
5492	1046	1103	5492A	B		112147	W178.1		1802	1940	5497A	B
5492	1108	1144	5493A	B					1945	2127	5498A	B
5493	1233	1242	5493A	B		130904	E155.1		2132	2318	5499A	B
5493	1248	1332	5494A	B								
5494	1420	1429	5494A	B		145620	E128.3					
5494	1435	1519	5495A	B								
5495	1617	1706	5496A	B		164337	E101.5					
5496	1802	1854	5497A	B		183053	E074.7					
5497	1945	2041	5498A	B		201810	E047.9					
5498	2133	2228	5499A	B		220526	E021.0					
5499	2319	0015	5502R	A		235242	W005.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
25 JANUARY 1974

THIR							ASC. AND DESC. NODE		ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR		TIME	LONG				INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO		HRMNSS	DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR						ASC. NODE						
5500	0015	0104	5502R	A			004623	E160.8	5500	2318	0116	5502R	A
5501							023339	E134.0	5502	0307	0458	5502R	B
5502	0350	0439	5502R	B			042056	E107.2	5503	0504	0646	5503R	B
5503	0537	0626	5503R	B			060812	E080.3	5504	0652	0827	5504A	B
5504	0724	0813	5504A	B			075529	E053.5	5505	0832	1014	5505A	B
5505	0912	1000	5505A	B			094245	E026.7	5506	1019	1156	5506A	B
5506	1059	1148	5506A	B			113002	W000.1	5507	1202	1343	5507A	B
5507	1246	1335	5507A	B			131718	W026.9	5508	1348	1526	5508A	B
5508	1434	1522	5508A	B			150435	W053.8	5509	1532	1713	5509A	B
5509	1621	1710	5509A	B			165151	W080.6	5510	1718	1854	5510A	B
5510	1808	1854	5510A	B			183908	W107.4	5511	1900	2041	5511A	B
5511	1955	2041	5511A	B			202624	W134.2	5512	2046	2232	5512A	B
5512	2143	2231	5512A	B			221341	W161.0					
	NIGHTTIME THIR						DESC. NODE			NEMS - SCR - ITPR			
5500	0104	0116	5502R	A			013959	W032.6		2319	0116	5502R	A
5501	0307	0350	5502R	B			032715	W059.4		0307	0459	5502R	B
5502	0439	0458	5502R	B			051432	W086.3		0504	0647	5503R	B
5502	0504	0537	5503R	B						0652	0827	5504A	B
5503	0626	0646	5503R	B			070148	W113.1		0832	1002	5505A	B
5503	0652	0724	5504A	B						1019	1157	5506A	B
5504	0813	0827	5504A	B			084905	W139.9		1202	1344	5507A	B
5504	0832	0912	5505A	B						1348	1527	5508A	B
5505	1000	1013	5505A	B			103621	W166.7		1532	1713	5509A	B
5505	1019	1059	5506A	B						1718	1855	5510A	B
5506	1148	1156	5506A	B			122338	E166.5		1859	2041	5511A	B
5506	1202	1246	5507A	B						2046	2233	5512A	B
5507	1335	1343	5507A	B			141054	E139.7					
5507	1350	1434	5508A	B									
5508	1532	1621	5509A	B			155811	E112.9					
5509	1718	1808	5510A	B			174527	E086.0					
5510	1900	1955	5511A	B			193244	E059.2					
5511	2046	2143	5512A	B			212000	E032.4					
5512							230717	E005.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
26 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5513						000057	E172.1	5514	0033	0226	5516R	A
5514	0117	0206	5516R	A		014814	E145.3	5515	0220	0415	5515R	B
5515	0305	0353	5515R	B		033530	E118.5	5516	0421	0601	5516R	B
5516	0452	0540	5516R	B		052246	E091.7	5517	0607	0742	5517A	B
5517	0639	0728	5517A	B		071003	E064.9	5518	0747	0929	5518A	B
5518	0826	0915	5518A	B		085719	E038.0	5519	0934	1118	5519A	B
5519	1014	1102	5519A	B		104436	E011.2	5520	1123	1300	5520A	B
5520	1201	1250	5520A	B		123152	W015.6	5521	1307	1445	5521A	B
5521	1348	1437	5521A	B		141909	W042.4	5522	1452	1631	5522A	B
5522	1536	1624	5522A	B		160625	W069.2	5523	1636	1809	5523A	B
5523	1723	1810	5523A	B		175342	W096.1	5524	1815	1957	5524A	B
5524	1910	1957	5524A	B		194058	W122.9	5525	2003	2144	5525A	B
5525	2057	2143	5525A	B		212815	W149.7					
5526						231531	W176.5					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5513	0033	0117	5516R	A		005433	W021.2		0032	0226	5516R	A
5514	0206	0226	5516R	A		024150	W048.1		0219	0415	5515R	B
5514	0220	0305	5515R	B					0421	0601	5516R	B
5515	0353	0415	5515R	B		042906	W074.9		0606	0742	5517A	B
5515	0421	0452	5516R	B					0746	0928	5518A	B
5516	0540	0600	5516R	B		061623	W101.7		0933	1118	5519A	B
5516	0557	0639	5517A	B					1123	1301	5520A	B
5517	0728	0741	5517A	B		080339	W128.5		1306	1446	5521A	B
5517	0746	0826	5518A	B					1451	1631	5522A	B
5518	0915	0927	5518A	B		095056	W155.3		1635	1810	5523A	B
5518	0933	1014	5519A	B					1815	1958	5524A	B
5519	1102	1117	5519A	B		113812	E177.8		2003	2144	5525A	B
5519	1123	1201	5520A	B								
5520	1250	1259	5520A	B		132529	E151.0					
5520	1306	1348	5521A	B								
5521	1437	1445	5521A	B		151245	E124.2					
5521	1451	1536	5522A	B								
5522	1624	1630	5522A	B		170002	E097.4					
5522	1636	1723	5523A	B								
5523	1815	1910	5524A	B		184718	E070.6					
5524	2003	2057	5525A	B		203435	E043.7					
5525						222151	E016.9					
5526	2348	0032	5529R	A		000907	W009.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
27 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5527	0032	0121	5529R	A		010248	E156.7	5527	2348	0144	5529R	A
5528						025004	E129.9	5529	0323	0515	5529R	B
5529	0406	0455	5529R	B		043721	E103.1	5530	0520	0703	5530R	B
5530	0554	0642	5530A	B		062437	E076.2	5531	0708	0845	5531A	B
5531	0741	0830	5531A	B		081154	E049.4	5532	0849	1030	5532A	B
5532	0928	1017	5532A	B		095910	E022.6	5533	1035	1213	5533A	B
5533	1116	1204	5533A	B		114627	W004.2	5534	1219	1400	5534A	B
5534	1303	1352	5534A	B		133343	W031.0	5535	1405	1545	5535A	B
5535	1450	1539	5535A	B		152059	W057.9	5536	1550	1725	5536A	B
5536	1637	1725	5536A	B		170816	W084.7	5537	1732	1913	5537A	B
5537	1825	1911	5537A	B		185532	W111.5	5538	1918	2102	5538A	B
5538						204249	W138.3	5539	2107	2245	5539A	B
5539	2159	2245	5539A	B		223005	W165.2					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5527	0121	0144	5529R	A		015624	W036.7		2348	0144	5529R	A
5528	0323	0406	5529R	B		034340	W063.5		0323	0515	5529R	B
5529	0455	0514	5529R	B		053057	W090.4		0520	0703	5530R	B
5529	0520	0554	5530A	B					0708	0845	5531A	B
5530	0642	0701	5530A	B		071813	W117.2		0848	1030	5532A	B
5530	0708	0741	5531A	B					1035	1213	5533A	B
5531	0830	0843	5531A	B		090530	W144.0		1218	1400	5534A	B
5531	0849	0928	5532A	B					1405	1545	5535A	B
5532	1017	1029	5532A	B		105246	W170.8		1550	1727	5536A	B
5532	1035	1116	5533A	B					1731	1914	5537A	B
5533	1204	1212	5533A	B		124003	E162.4		1918	2103	5538A	B
5533	1218	1303	5534A	B					2107	2246	5539A	B
5534	1352	1359	5534A	B		142719	E135.5					
5534	1405	1450	5535A	B								
5535	1539	1544	5535A	B		161436	E108.7					
5535	1550	1637	5536A	B								
5536	1731	1825	5537A	B		180152	E081.9					
5537						194909	E055.1					
5538	2108	2159	5539A	B		213625	E028.3					
5539						232342	E001.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
28 JANUARY 1974

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
5540						001722	E168.1	5541	0048	0242	5542R	A
5541	0134	0222	5542R	A		020438	E141.2	5542	0235	0430	5542R	B
5542	0321	0410	5542R	B		035155	E114.4	5543	0433	0618	5543R	B
5543	0508	0557	5543R	B		053911	E087.6	5544	0624	0758	5544A	B
5544	0656	0744	5544A	B		072628	E060.8	5545	0803	0945	5545A	B
5545	0843	0932	5545A	B		091344	E034.0	5546	0950	1134	5546A	B
5546	1030	1119	5546A	B		110101	E007.1	5547	1139	1316	5547A	B
5547	1218	1306	5547A	B		124817	W019.7	5548	1321	1501	5548A	B
5548	1405	1453	5548A	B		143534	W046.5	5549	1506	1645	5549A	B
5549	1552	1641	5549A	B		162250	W073.3	5550	1649	1829	5550A	B
5550	1739	1828	5550A	B		181007	W100.1	5551	1834	2012	5551A	B
5551	1927	2012	5551A	B		195723	W127.0	5552	2017	2203	5552A	B
5552	2114	2201	5552A	B		214439	W153.8	5553	2204	0001	5556R	A
5553	2301	2350	5556R	A		233156	E179.4					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5540	0049	0134	5542R	A		011058	W025.4		0048	0241	5542R	A
5541	0222	0240	5542R	A		025815	W052.2		0235	0430	5542R	B
5541	0235	0321	5542R	B					0436	0619	5543R	B
5542	0410	0431	5542R	B		044531	W079.0		0624	0758	5544A	B
5542	0437	0508	5543R	B					0802	0946	5545A	B
5543	0557	0618	5543R	B		063248	W105.8		0950	1134	5546A	B
5543	0624	0656	5544A	B					1138	1317	5547A	B
5544	0744	0757	5544A	B		082004	W132.7		1321	1502	5548A	B
5544	0803	0843	5545A	B					1506	1645	5549A	B
5545	0932	0945	5545A	B		100721	W159.5		1649	1829	5550A	B
5545	0950	1030	5546A	B					1834	2012	5551A	B
5546	1119	1132	5546A	B		115437	E173.7		2017	2203	5552A	B
5546	1138	1218	5547A	B					2204	0001	5556R	A
5547	1306	1316	5547A	B		134154	E146.9					
5547	1321	1405	5548A	B								
5548	1453	1500	5548A	B		152910	E120.1					
5548	1506	1552	5549A	B								
5549	1649	1739	5550A	B		171627	E093.3					
5550	1834	1927	5551A	B		190343	E066.4					
5551	2017	2114	5552A	B		205059	E039.6					
5552	2204	2301	5556R	A		223816	E012.8					
5553	2350	0001	5556R	A		002532	W014.0					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
29 JANUARY 1974

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5554						011912	E152.6	5555	0151	0348	5555R	B
5555	0236	0324	5555R	B		030629	E125.8	5556	0355	0532	5556R	B
5556	0423	0512	5556R	B		045345	E098.9	5558	0724	0858	5558A	B
5557						064102	E072.1	5559	0904	1044	5559A	B
5558	0758	0846	5558A	B		082818	E045.3	5560	1049	1235	5560A	B
5559	0945	1034	5559A	B		101535	E018.5	5561	1240	1415	5561A	B
5560	1132	1221	5560A	B		120251	W008.3	5562	1421	1600	5562A	B
5561	1319	1408	5561A	B		135008	W035.2	5563	1605	1744	5563A	B
5562	1507	1555	5562A	B		153724	W062.0	5564	1749	1926	5564A	B
5563	1654	1743	5563A	B		172441	W088.8	5565	1932	2113	5565A	B
5564	1841	1926	5564A	B		191157	W115.6	5566	2118	2303	5566A	B
5565	2029	2113	5565A	B	1S	205914	W142.4					
5566	2216	2303	5566A	B		224630	W169.3					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5554	0151	0236	5555R	B		021249	W040.9		0151	0348	5555R	B
5555	0324	0347	5555R	B		040005	W067.7		0353	0531	5556R	B
5555	0354	0423	5556R	B					0724	0858	5558A	B
5556	0512	0530	5556R	B		054722	W094.5		0904	1044	5559A	B
5557	0724	0758	5558A	B		073438	W121.3		1049	1236	5560A	B
5558	0846	0855	5558A	B		092155	W148.1		1240	1416	5561A	B
5558	0904	0945	5559A	B					1421	1600	5562A	B
5559	1034	1043	5559A	B		110911	W174.9		1605	1744	5563A	B
5559	1049	1132	5560A	B					1749	1927	5564A	B
5560	1221	1234	5560A	B		125628	E158.3		1931	2114	5565A	B
5560	1240	1319	5561A	B					2119	2304	5566A	B
5561	1408	1415	5561A	B		144344	E131.5					
5561	1421	1507	5562A	B								
5562	1605	1654	5563A	B		163101	E104.6					
5563	1749	1841	5564A	B		181817	E077.8					
5564	1931	2029	5565A	B	1N	200534	E051.0					
5565	2119	2216	5566A	B		215250	E024.2					
5566						234007	W002.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
30 JANUARY 1974

THIR							ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE				INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
5567						003347	E163.9	5568	0105	0257	5569R	A
5568	0150	0239	5569R	A		022103	E137.1	5569	0253	0447	5569R	B
5569	0338	0426	5569R	B		040820	E110.3	5570	0453	0633	5570R	B
5570	0525	0614	5570R	B		055536	E083.5	5571	0639	0815	5571A	B
5571	0712	0801	5571A	B		074252	E056.7	5572	0820	0959	5572A	B
5572	0900	0948	5572A	B		093009	E029.8	5573	1004	1144	5573A	B
5573	1047	1135	5573A	B		111725	E003.0	5574	1150	1331	5574A	B
5574	1234	1323	5574A	B		130442	W023.8	5575	1336	1515	5575A	B
5575	1421	1510	5575A	B		145158	W050.6	5576	1521	1700	5576A	B
5576	1609	1657	5576A	B		163915	W077.4	5577	1705	1844	5577A	B
5577	1756	1842	5577A	B		182631	W104.3	5578	1848	2030	5578A	B
5578	1943	2028	5578A	B		201348	W131.1	5579	2035	2220	5579A	B
5579	2130	2219	5579A	B		220104	W157.9	5580	2220	0017	5583R	A
5580	2318	0006	5583R	A		234821	E175.3					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5567	0105	0150	5569R	A		012723	W029.5		0104	0258	5569R	A
5568	0239	0256	5569R	A		031440	W056.3		0252	0447	5569R	B
5568	0252	0338	5569R	B					0452	0634	5570R	B
5569	0426	0446	5569R	B		050156	W083.1		0639	0816	5571A	B
5569	0453	0525	5570R	B					0820	0959	5572A	B
5570	0614	0631	5570R	B		064913	W109.9		1003	1144	5573A	B
5570	0639	0712	5571A	B					1148	1332	5574A	B
5571	0801	0814	5571A	B		083629	W136.7		1336	1516	5575A	B
5571	0820	0900	5572A	B					1520	1700	5576A	B
5572	0948	0958	5572A	B		102346	W163.6		1705	1843	5577A	B
5572	1004	1047	5573A	B					1848	2030	5578A	B
5573	1135	1143	5573A	B		121102	E169.6		2035	2220	5579A	B
5573	1148	1234	5574A	B					2220	0017	5583R	A
5574	1323	1331	5574A	B		135818	E142.8					
5574	1337	1421	5575A	B								
5575	1521	1609	5576A	B		154535	E116.0					
5576	1705	1756	5577A	B		173251	E089.2					
5577	1848	1943	5578A	B		192008	E062.3					
5578	2035	2130	5579A	B		210724	E035.5					
5579	2220	2318	5583R	A		225441	E008.7					
5580	0006	0016	5583R	A		004157	W018.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
31JANUARY 1974

THIR							ASC. AND		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
5581						013537	E148.5	5582	0207	0405	5582R	B
5582	0252	0341	5582R	B		032254	E121.6	5583	0411	0546	5583R	B
5583	0440	0528	5583R	B		051010	E094.8	5584	0553	0729	5584A	B
5584	0627	0716	5584A	B		065727	E068.0	5585	0733	0915	5585A	B
5585	0814	0903	5585A	B		084443	E041.2	5586	0920	1105	5586A	B
5586	1001	1050	5586A	B		103200	E014.4	5587	1110	1246	5587A	B
5587	1149	1237	5587A	B		121916	W012.5	5588	1252	1432	5588A	B
5588	1336	1425	5588A	B		140632	W039.3	5589	1437	1615	5589A	B
5589	1523	1612	5589A	B		155349	W066.1	5590	1621	1800	5590A	B
5590	1711	1759	5590A	B		174105	W092.9	5591	1806	1943	5591A	B
5591	1858	1941	5591A	B		192822	W119.7	5592	1948	2130	5592A	B
5592	2045	2129	5592A	B		211538	W146.6	5593	2135	2320	5593A	B
5593	2232	2319	5593A	B		230255	W173.4					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
5581	0207	0252	5582R	B		022914	W044.9		0206	0404	5582R	B
5582	0341	0403	5582R	B		041630	W071.8		0410	0547	5583R	B
5582	0410	0440	5583R	B					0552	0729	5584A	B
5583	0528	0546	5583R	B		060347	W098.6		0733	0915	5585A	B
5583	0552	0627	5584A	B					0920	1105	5586A	B
5584	0716	0727	5584A	B		075103	W125.4		1110	1247	5587A	B
5584	0733	0814	5585A	B					1252	1432	5588A	B
5585	0903	0914	5585A	B		093820	W152.2		1437	1616	5589A	B
5585	0920	1001	5586A	B					1621	1801	5590A	B
5586	1050	1104	5586A	B		112536	W179.0		1806	1943	5591A	B
5586	1110	1149	5587A	B					1947	2130	5592A	B
5587	1237	1246	5587A	B		131253	E154.1		2135	2321	5593A	B
5587	1252	1336	5588A	B								
5588	1425	1431	5588A	B		150009	E127.3					
5588	1437	1523	5589A	B								
5589	1621	1711	5590A	B		164726	E100.5					
5590	1806	1858	5591A	B		183442	E073.7					
5591	1948	2045	5592A	B		202159	E046.9					
5592	2135	2232	5593A	B		220915	E020.1					
5593						235632	W006.8					

SECTION 3

ELECTRICALLY SCANNING MICROWAVE RADIOMETER DISPLAYS

One ESMR display per day has been selected for presentation in this section. All ESMR coverage times are listed in the Data Availability On-Off Times (Table 2-2). Each display contains the following items:

Nimbus 5 ESMR

This identifies the satellite (Nimbus 5) and the experiment (ESMR).

Date

This identifies the Greenwich day, month, and year the data is recorded.

Data Orbit

This data orbit number identifies only the last data orbit on each display. Usually parts of two data orbits are on the same display, since all data acquired during each satellite interrogation is presented on one 4 × 5-inch negative. In general, nighttime data is on the left and daytime data is on the right.

Program

No Program number is identified on these displays. Its intended use was to identify the appropriate table which would list the temperature interval for each gray level in the gray scale. The temperature programs used since launch are listed in Table 3-1.

Gray Scale

A single 11-step gray scale serves to define ESMR brightness temperatures in all three swaths, by the assignment of a different brightness temperature range to each step for each swath. Table 3-1 defines the gray scale table used on all images since launch.

Image Swaths (1, 2, 3)

A set of three swaths, labeled 1, 2, and 3, separates the same recorded data into three temperature intervals (defined in Table 3-1).

Table 3-1

ESMR Gray Scale Steps Versus Brightness Temperature for Each of the Three ESMR Swaths to the ESMR Pictorial Displays
(Temperature in °K)

		Table 1 Orbit 104 through 502			Table 2 Orbit 503 through 5593		
Swath		1	2	3	1	2	3
Gray Scale Number							
(black)	1	> 200	> 262	> 280	> 210	> 266	> 290
	2	109-200	256-262	277-280	202-210	258-266	286-290
	3	180-190	250-256	274-277	194-202	250-258	282-286
	4	170-180	240-250	271-274	186-194	242-250	278-282
	5	160-170	230-240	268-271	178-186	234-242	274-278
	6	150-160	220-230	265-268	170-178	226-234	270-274
	7	140-150	210-220	262-265	162-170	218-226	266-270
	8	130-140	200-210	259-262	154-162	210-218	262-266
	9	120-130	190-200	256-259	146-154	202-210	258-262
	10	110-120	180-190	253-256	138-146	194-202	254-258
(white	11	< 110	< 180	< 253	< 138	< 194	< 254

The right set of three swaths is a continuation of the left set and is offset because of the limitations of the 4 × 5-inch film format. The three swath presentation is used because it shortens the temperature ranges spanned by each step of the gray scale, and, therefore, permits discrimination of various meteorological and terrestrial phenomena.

Significant in swath 1 are the areas of atmospheric moisture and rainfall over oceans, Swath 2 brightness temperature range discriminates between new and multi-year ice and, over oceans, shows only rainfall areas. The high brightness temperatures of swath 3 outline some land areas of high soil moisture content or snow cover, but oceans lose almost all their temperature contrasts. The swath 3 information was lost because of an instrument malfunction between orbit 1062 (28 February) and orbit 2250 (27 May), and for intervals since orbit 3015 (23 July).

Time Code Index

The Time Code Index, in hours and minutes (GMT), is adjacent to the gray scale. The top number in each set is for the left group of three swaths/ the bottom number in each set is for the right group of three swaths. Time bars are spaced at five-minute intervals. The same time bars are used for the left and right swaths. The top or bottom time code index determines the time for each time bar.

Grids

Two grids, labeled GRID L and GRID R, identify the geographic coordinates for the imagery of the left (L) and the right (R) sets of swaths, respectively. Latitude lines are spaced at 10-degree intervals. Longitude lines are spaced at 10-degree intervals to 60 degrees north and south of the equator, and at 20-degree intervals from 60 to 80 degrees north and south. The equator (EQ), North Pole (NP), and South Pole (SP) are labeled, as well as longitude values at the equator and at 30 and 60 degrees north and south of the equator.

Swath Display Program

The antenna gain function is different at each beam position. Thus, to present a uniform surface temperature as the same shade of gray across a scan track requires that the output voltage at each antenna position be adjusted for its beam position and output voltage value. If the corrections are not precise, vertical bands will be evident in the ESMR pictorial displays.

Three different sets of calibration constants (Display Format Programs) were used during the first two months of operation to eliminate these vertical bands. Two additional programs have been used since the instrument malfunction of 28 February 1973. Volume 1 of this catalog series illustrates the vertical banding produced by the first three programs while the images in this section illustrate the banding produced by the last two. After 27 May, Program 5 was used for image displays whenever the instrument was operating normally. Table 3-2 shows the Display Format Programs used during this catalog period.

The brightness temperature accuracy varied with each Display Format Program. With display Program 1, which uses prelaunch calibration constants, the digital brightness temperature values have about ±20° K accuracy. With a change to postlaunch calibration constants, Programs 2 and 4 produce about ±2° to 5° K temperature value accuracies. Of course, with Programs 2 and 4, the displayed temperature values are accurate only within the limits of the temperature range of each step of the gray scales as defined in Table 3-1. Display Programs 5 and 6 used after the instrument malfunction of 28 February 1973, are considered to produce ±10° K temperature accuracies on the image displays.

A description of the ESMR experiment may be found in The Nimbus 5 User's Guide, Section 4, and instructions for ordering the data, both pictorial and digital, are in Section 1.7 of that Guide.

Table 3-2

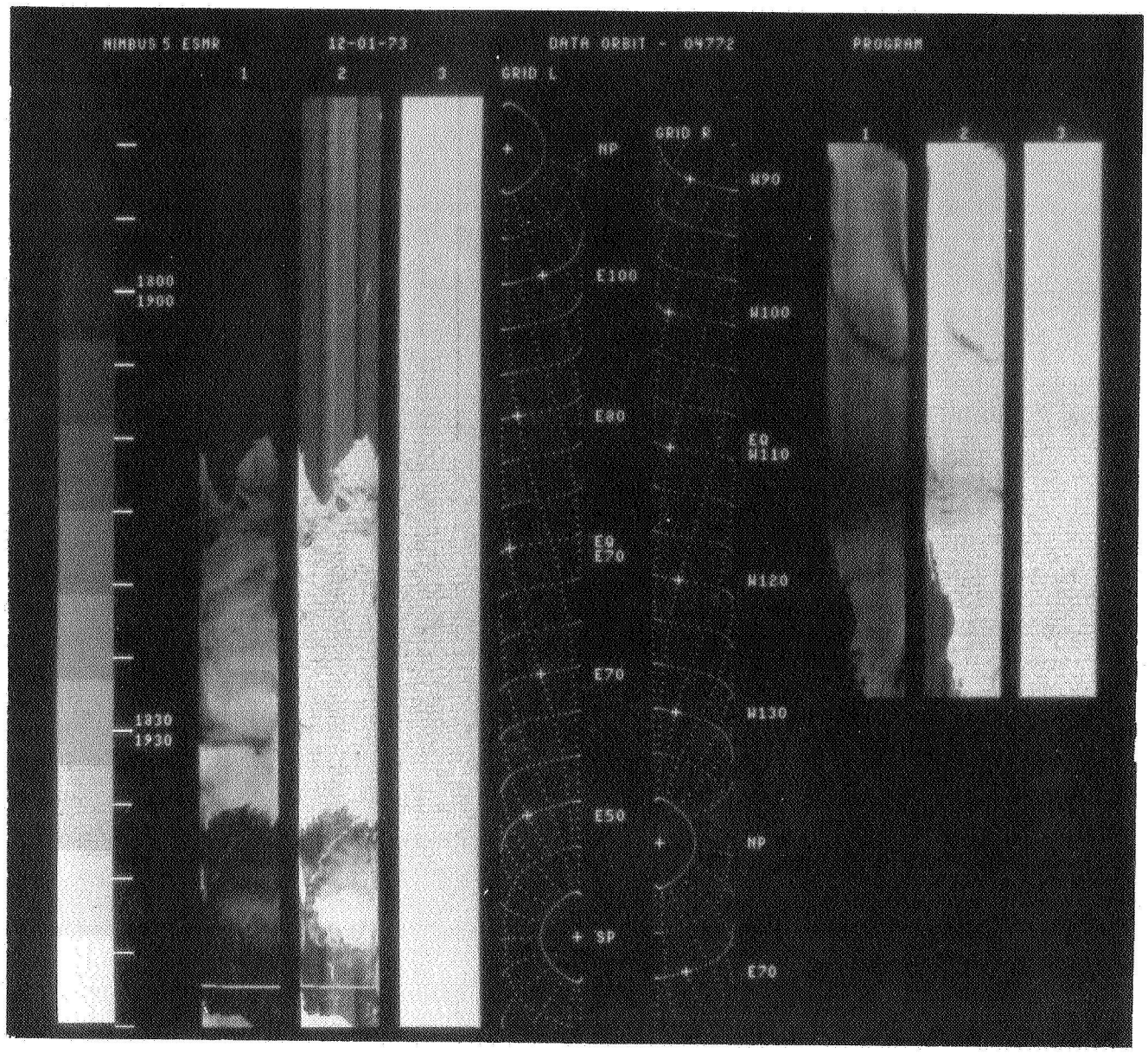
ESMR Display Format Programs For
December 1973 and January 1974

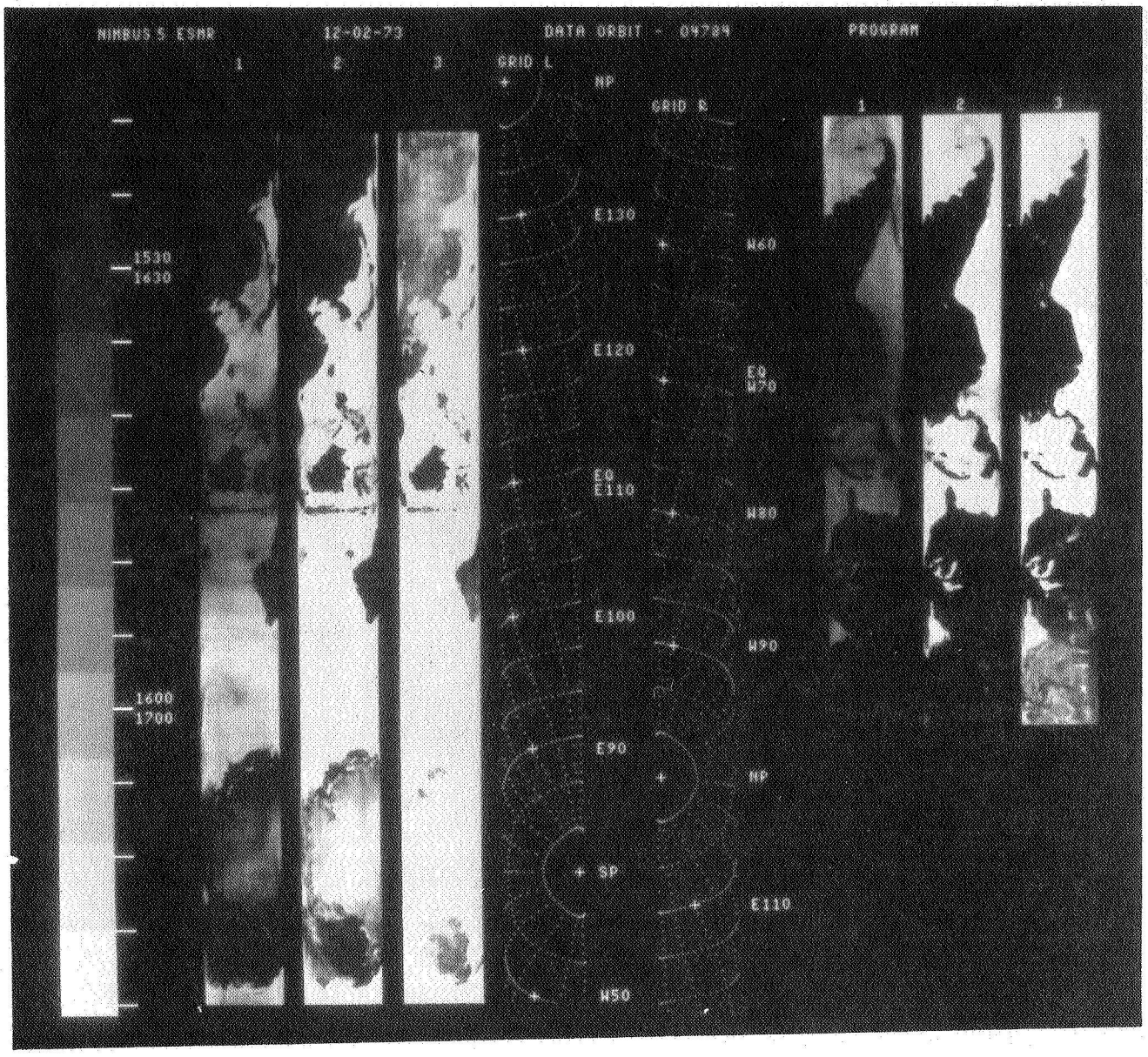
Orbits Processed with Display Format Program 5*		Orbits Processed with Display Format Program 6**	
Date	Orbits	Date	Orbits
2 December	4783-4788	1- 2 December	4762-4782
2- 3 December	4791-4793	2 December	4790
4 December	4805-4809	3- 4 December	4794-4804
6- 8 December	4830-4869	4- 5 December	4809-4827
9 December	4872-4881	9 December	4871
10 December	4884	10 December	4883
10 December	4889-4894	10 December	4886-4888
10 December	4896	10 December	4895
11-12 December	4899-4921	11 December	4898
13 December	4926	13 December	4924-4925
13 December	4928-4933	13 December	4927
18-21 December	4994-5041	13-18 December	4934-4993
22 December	5045-5052	21 December	5042-5043
22-23 December	5054-5061	22 December	5053
23 December	5063-5067	23 December	5062
23-24 December	5069-5074	23 December	5068
25-26 December	5085-5099	24 December	5075-5082
26 December	5103-5109	26 December	5100-5102
27 December	5112-5120	27 December	5111
27-28 December	5124-5130	27 December	5121-5123
29 Dec. - 2 Jan.	5144-5200	28-29 December	5131-5143
3-11 January	5206-5318	2 January	5201-5204
16 January	5383-5388	11-16 January	5319-5382
16-17 January	5391-5398	16 January	5389-5390
17 Janaury	5402	17 January	5399-5401
17-18 January	5404-5413	17 January	5403
18-19 January	5415-5423	18 January	5414
18-26 January	5426-5515	19 January	5424-5425
26-30 January	5526-5568	26 January	5516-5525
30-31 January	5576-5593	30 January	5569-5575

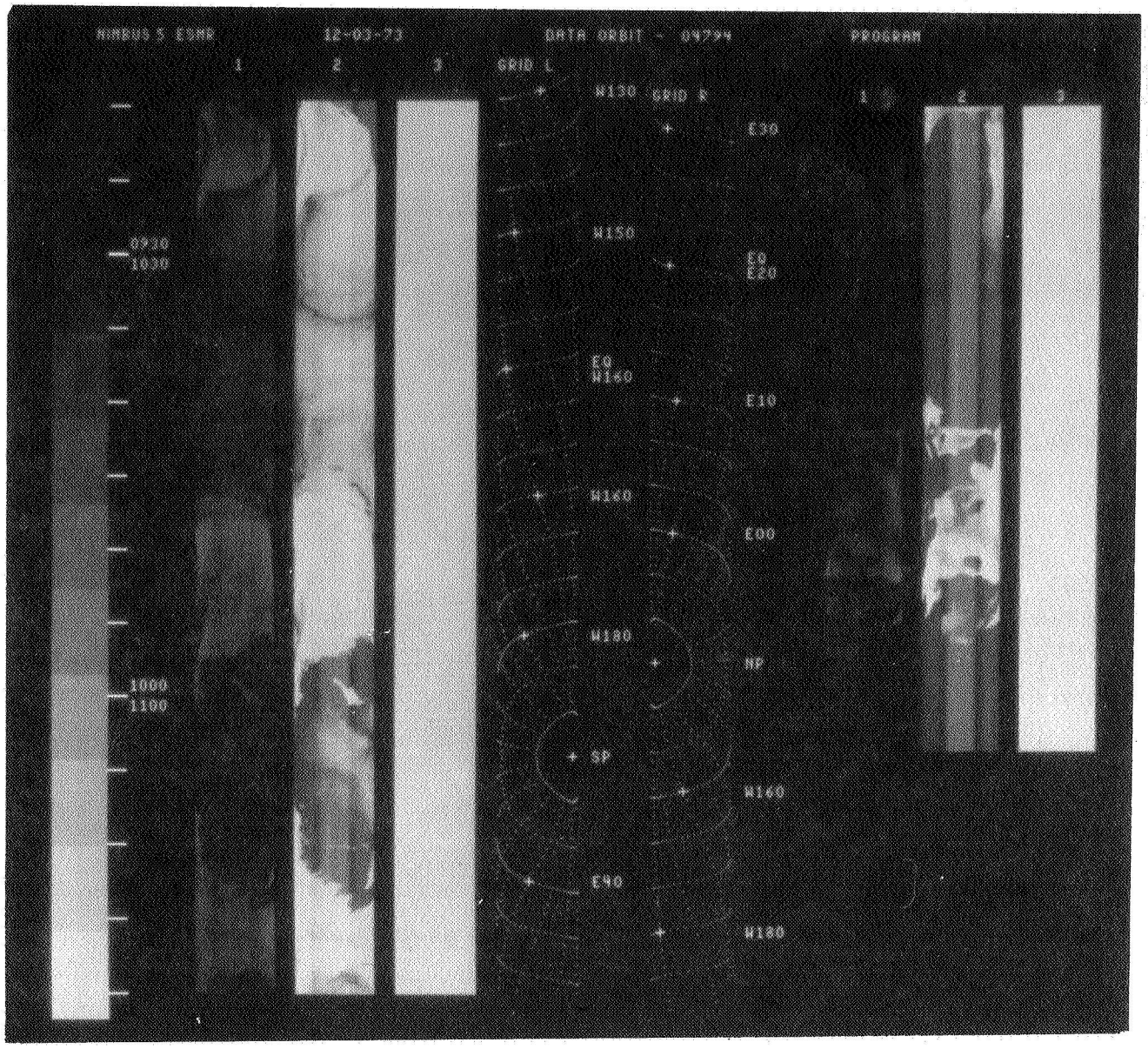
*Program 5 is used whenever the instrument is operating normally (data in all three swaths).

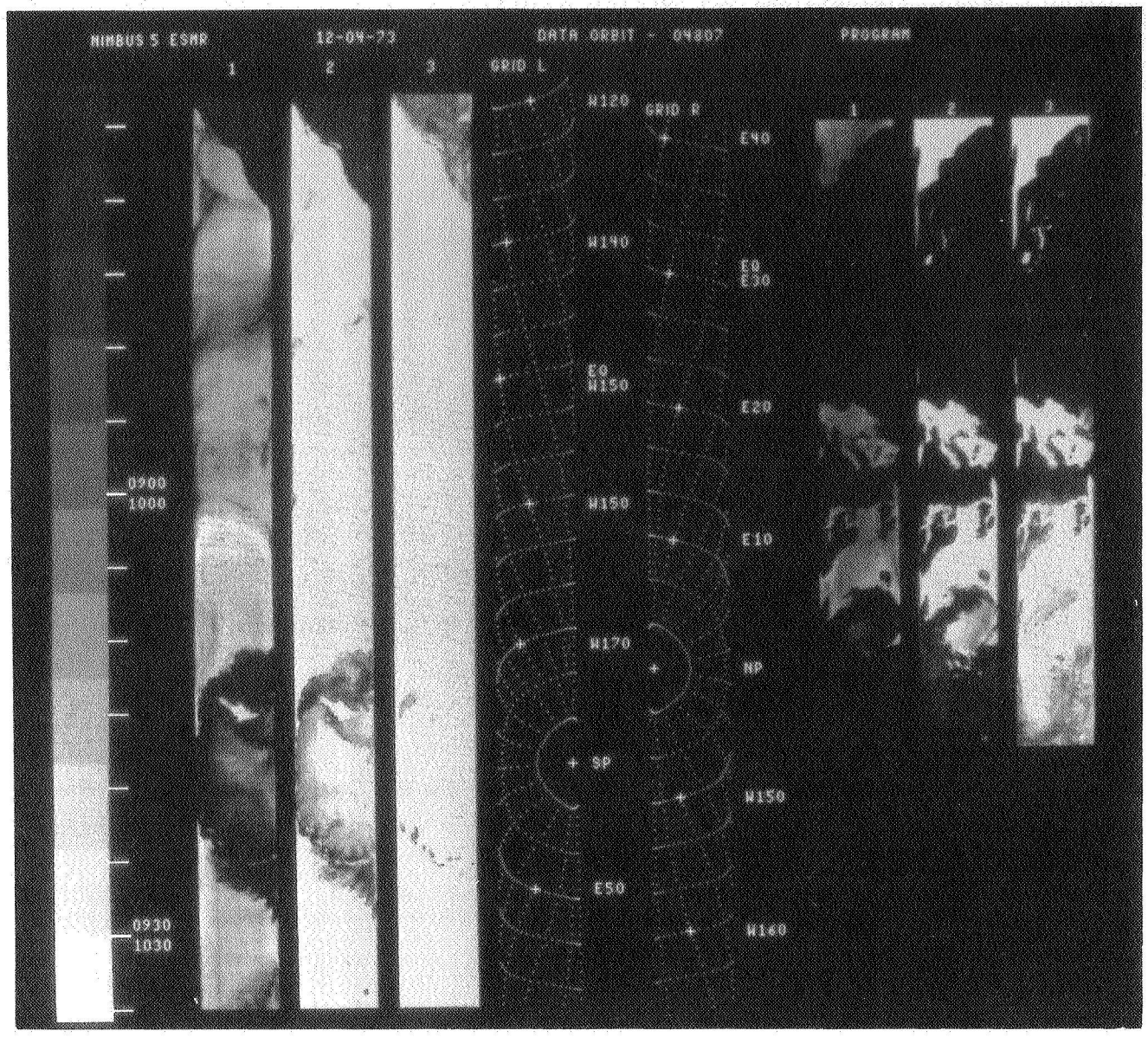
**Program 6 is used whenever the instrument is operating in the reduced response mode (data only in swaths one and two).

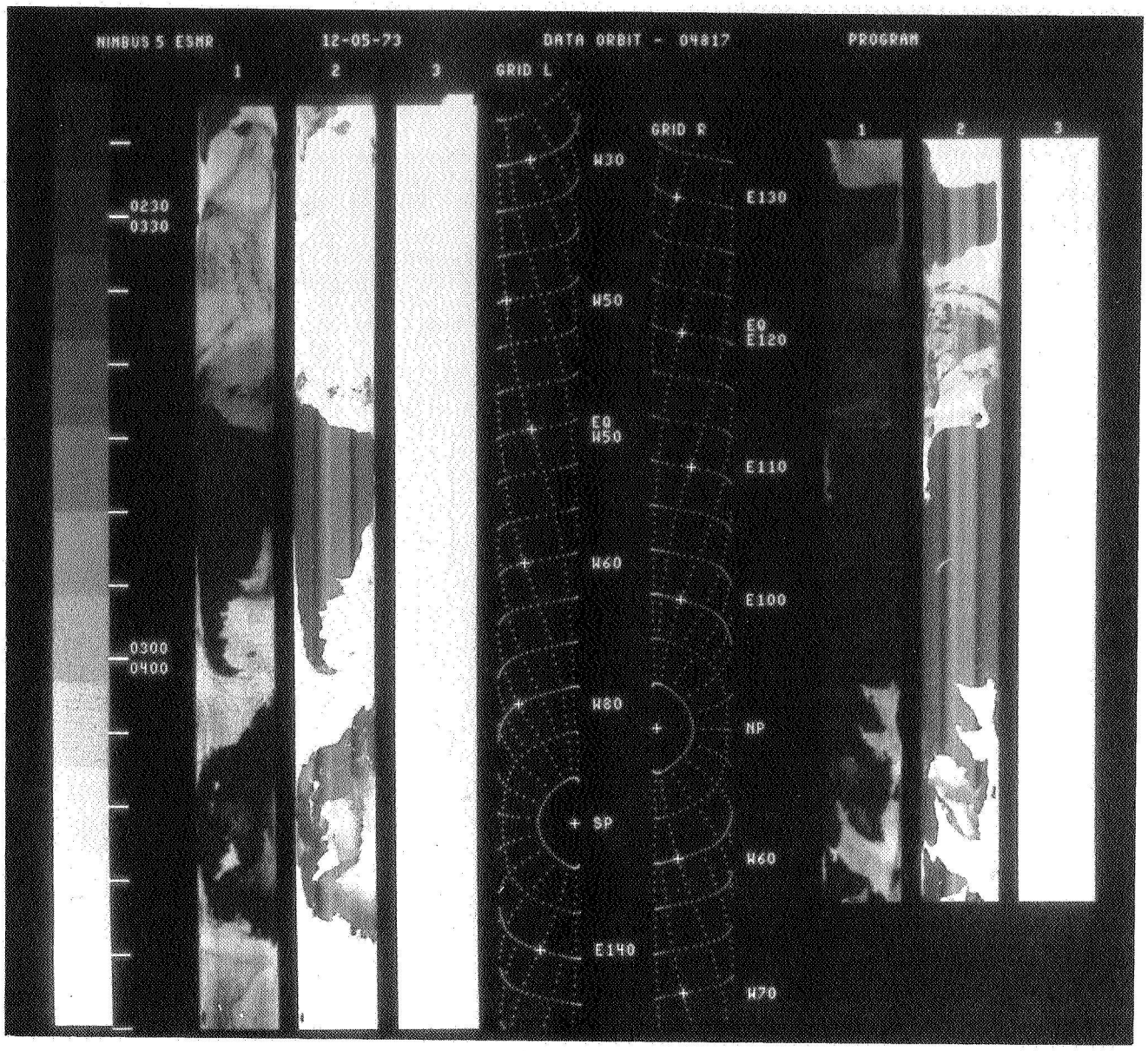
All orbits were processed with gray Scale Brightness Temperature Table 2 values (See Table 3-1).

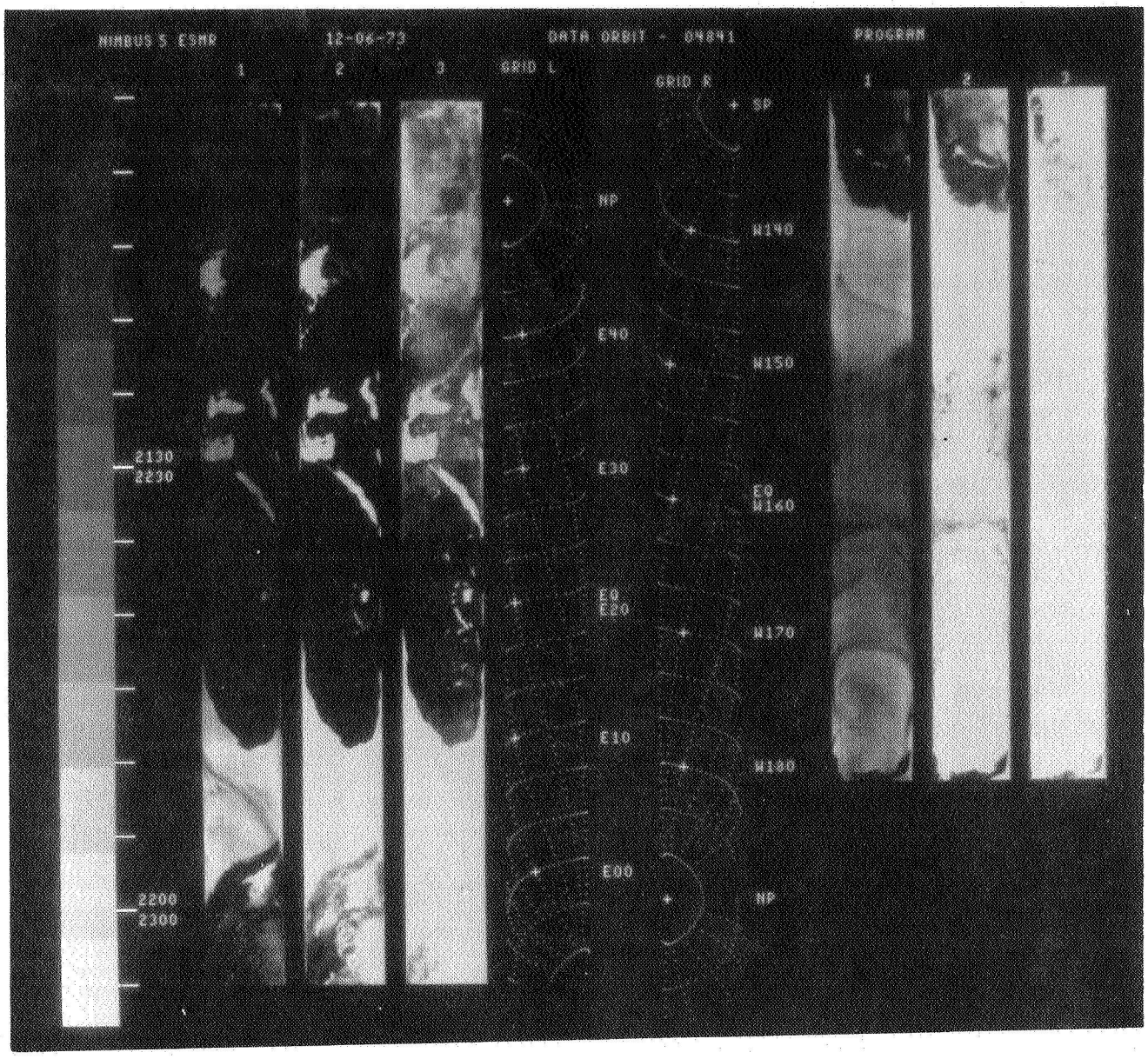

NIMBUS 5 ESMR
12-01-73
DATA ORBIT - 04772
PROGRAM
1
2
3
GRID L
GRID R
1800
1900
1930
1930
NP
W90
E100
W100
E80
EQ
W110
EQ
E70
W120
E70
W130
E50
NP
SP
E70

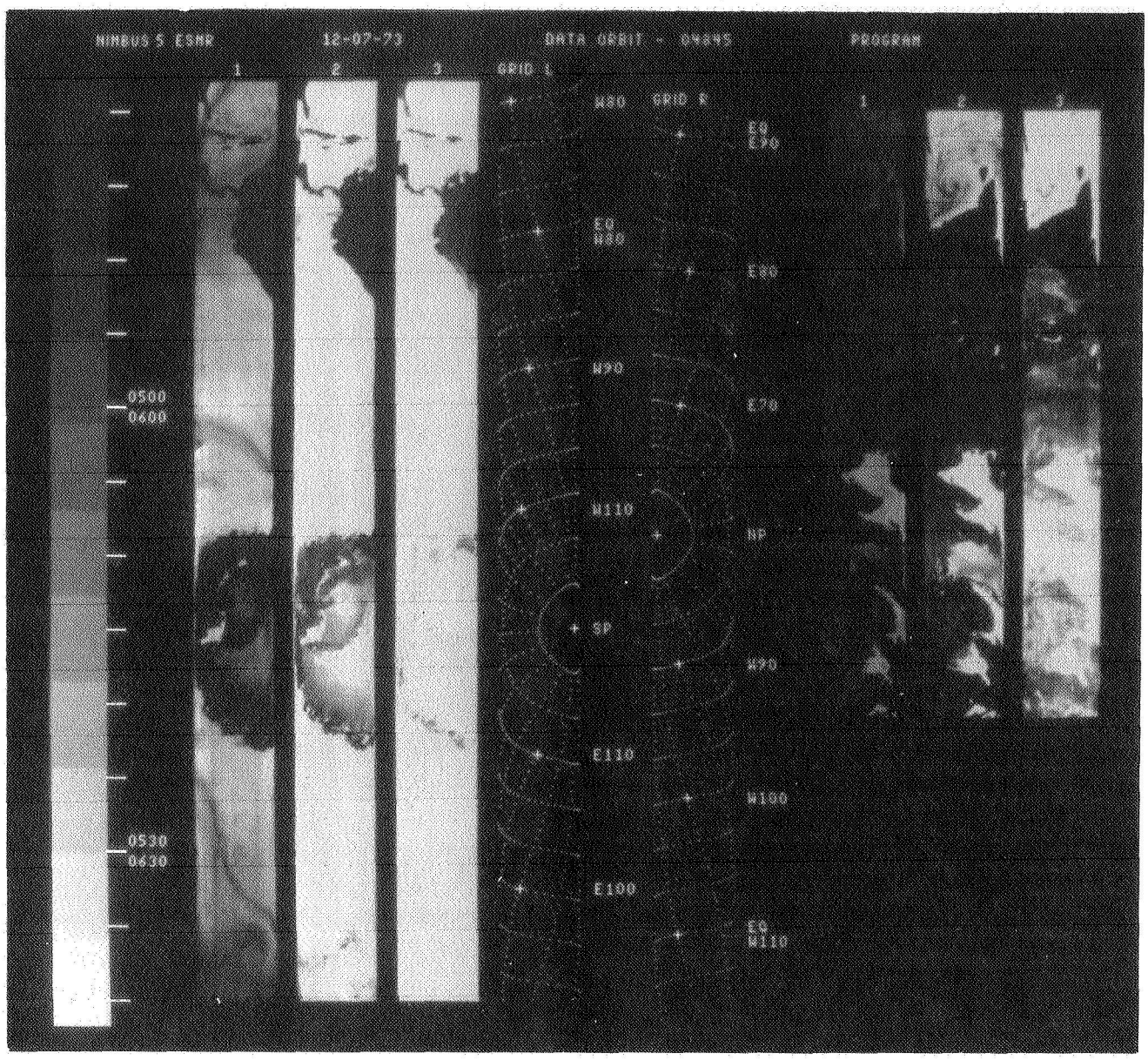

NIMBUS 5 ESMR
12-02-73
DATA ORBIT - 04784
PROGRAM
1
2
3
GRID L
NP
GRID R
E130
W60
E120
E0
W70
E0
E110
W80
E100
W90
E90
NP
SP
E110
W50
1530
1430
1600
1700

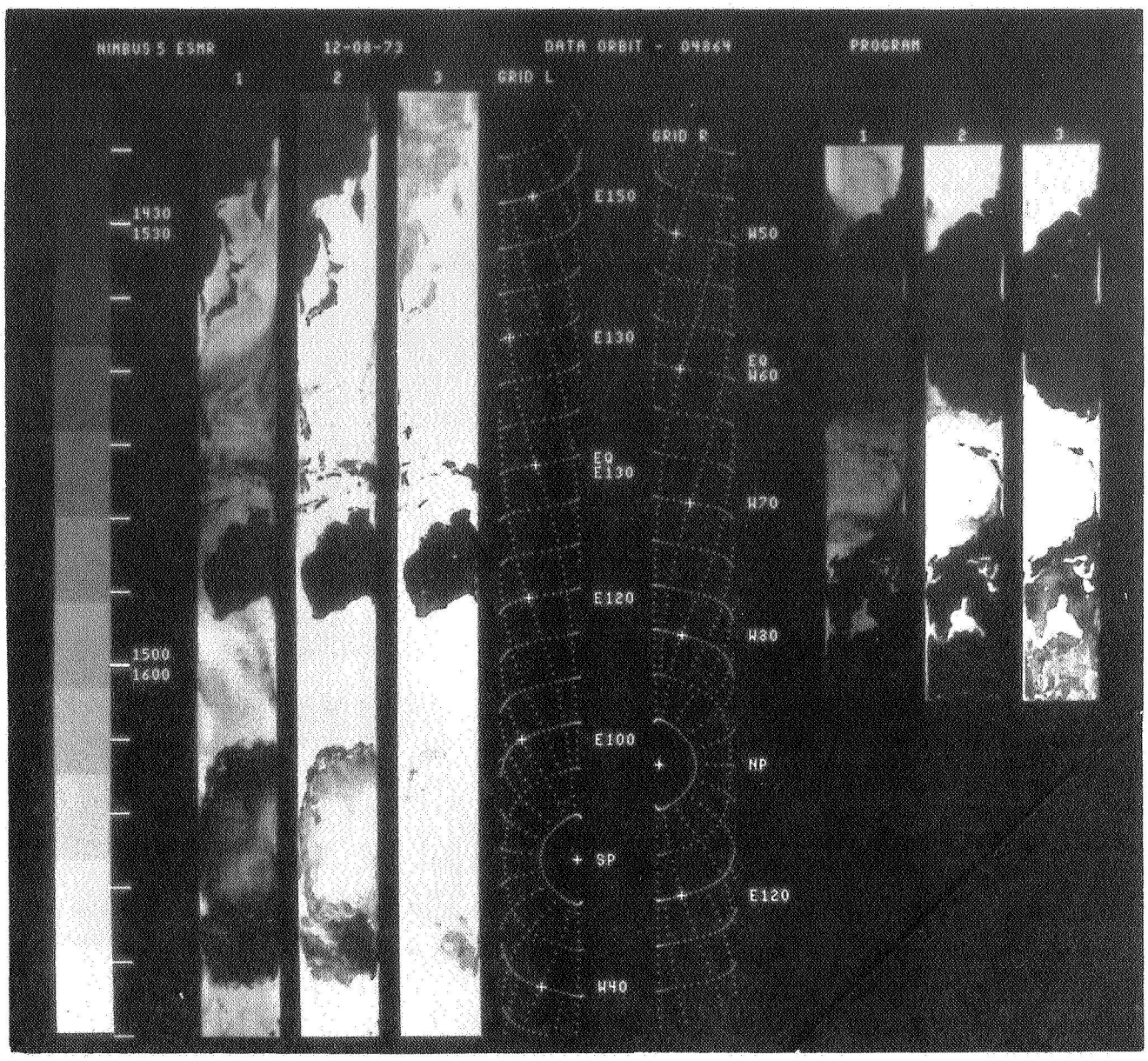

NIMBUS 5 ESMR
12-03-73
DATA ORBIT - 04794
PROGRAM
1
2
3
GRID L
GRID E
W130
E30
W150
E0
E20
E0
W160
E10
W140
E00
W180
NP
SP
W140
E40
W180
0930
1030
1000
1100

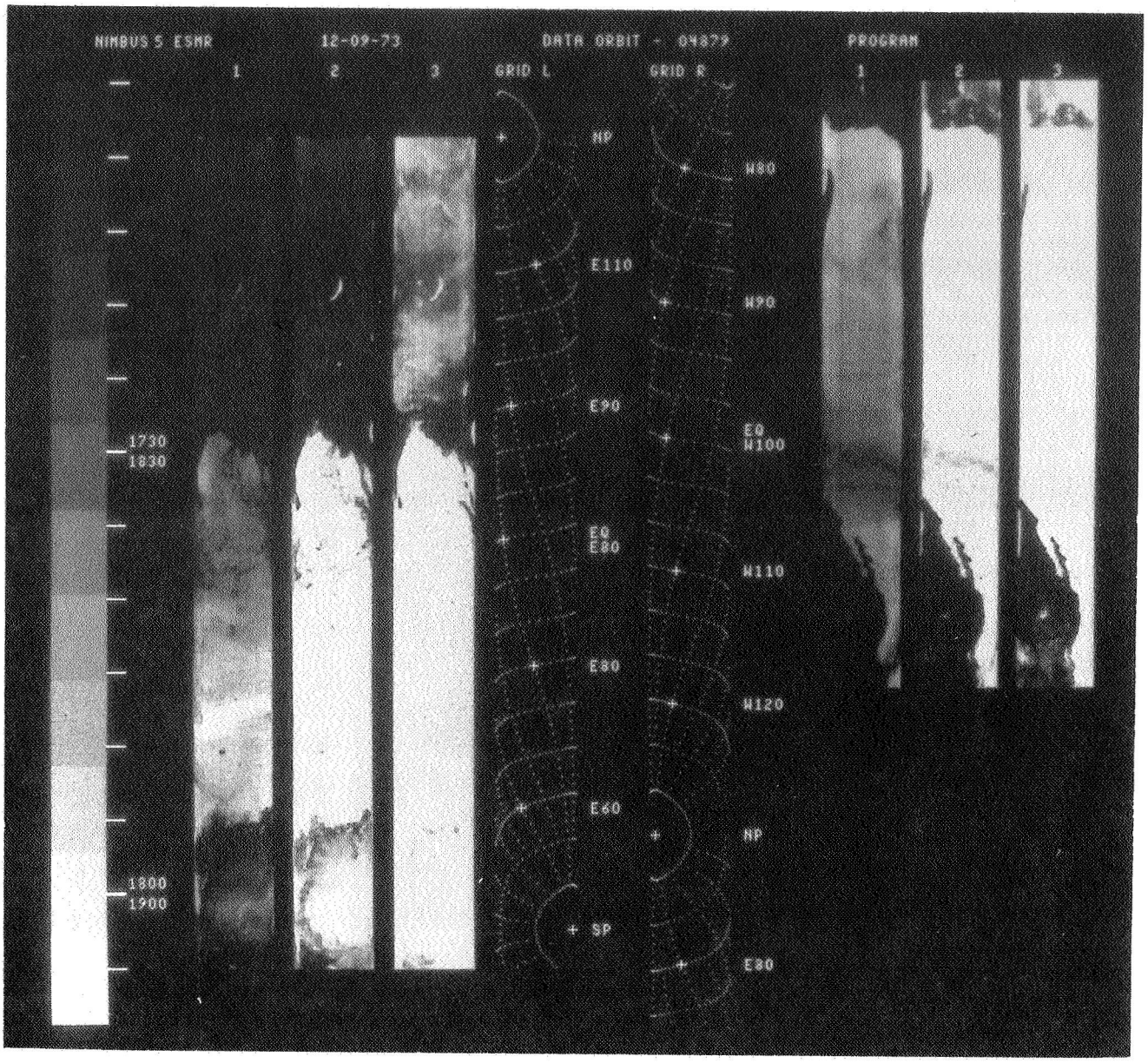

NIMBUS 5 ESMR
12-04-72
DATA ORBIT - 04807
PROGRAM
1
2
3
GRID L
GRID R
W120
E40
W140
EQ
E30
EQ
W150
E20
W150
E10
W170
NP
SP
W150
E50
W140
0900
1000
0930
1030

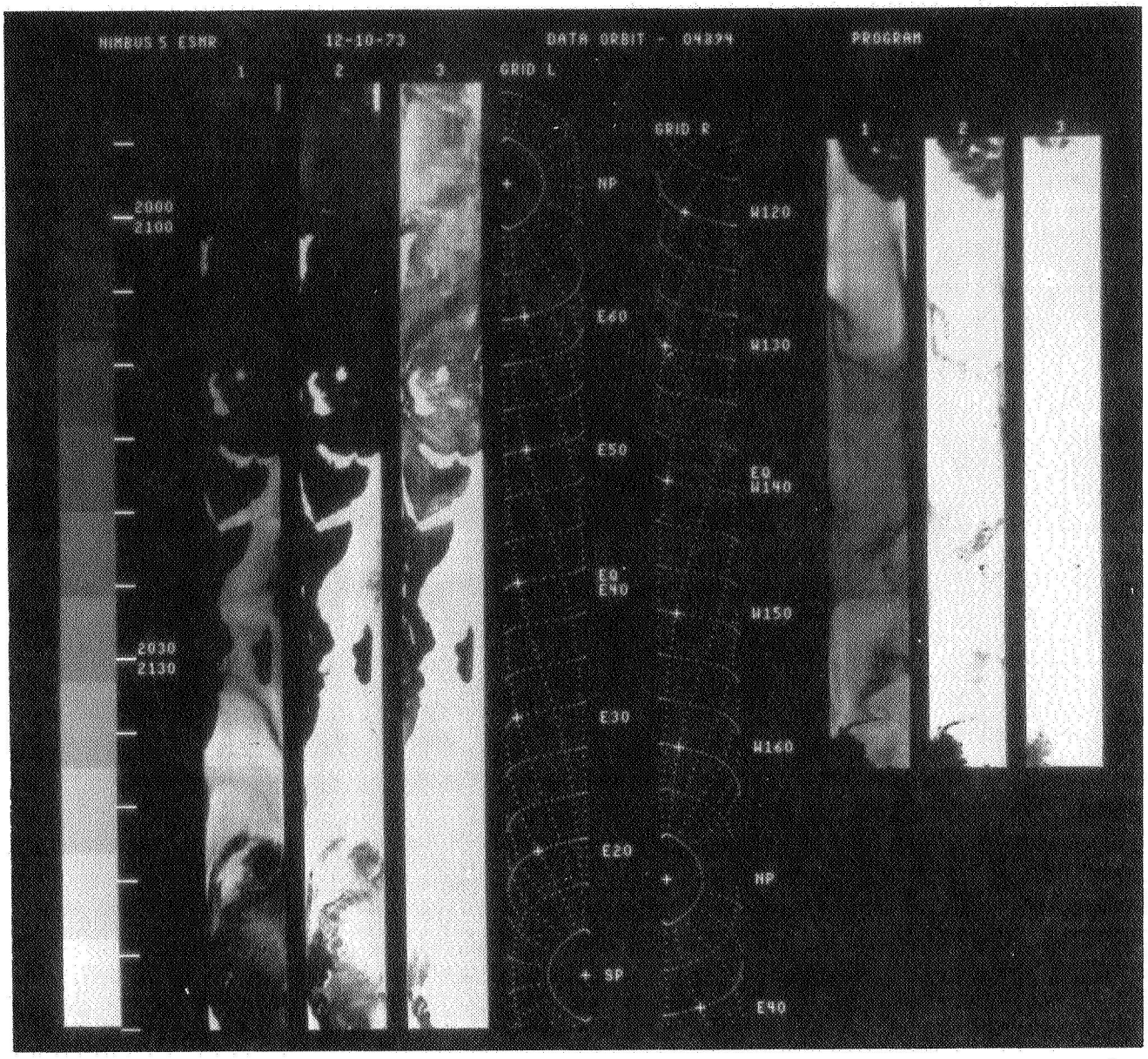

NIMBUS 5 ESMR
12-05-73
DATA ORBIT - 04817
PROGRAM
1
2
3
GRID L
GRID R
0230
0330
0300
0400
W30
E130
W50
EQ
E120
EQ
W50
E110
W60
E100
W80
NP
SP
W60
E140
W70

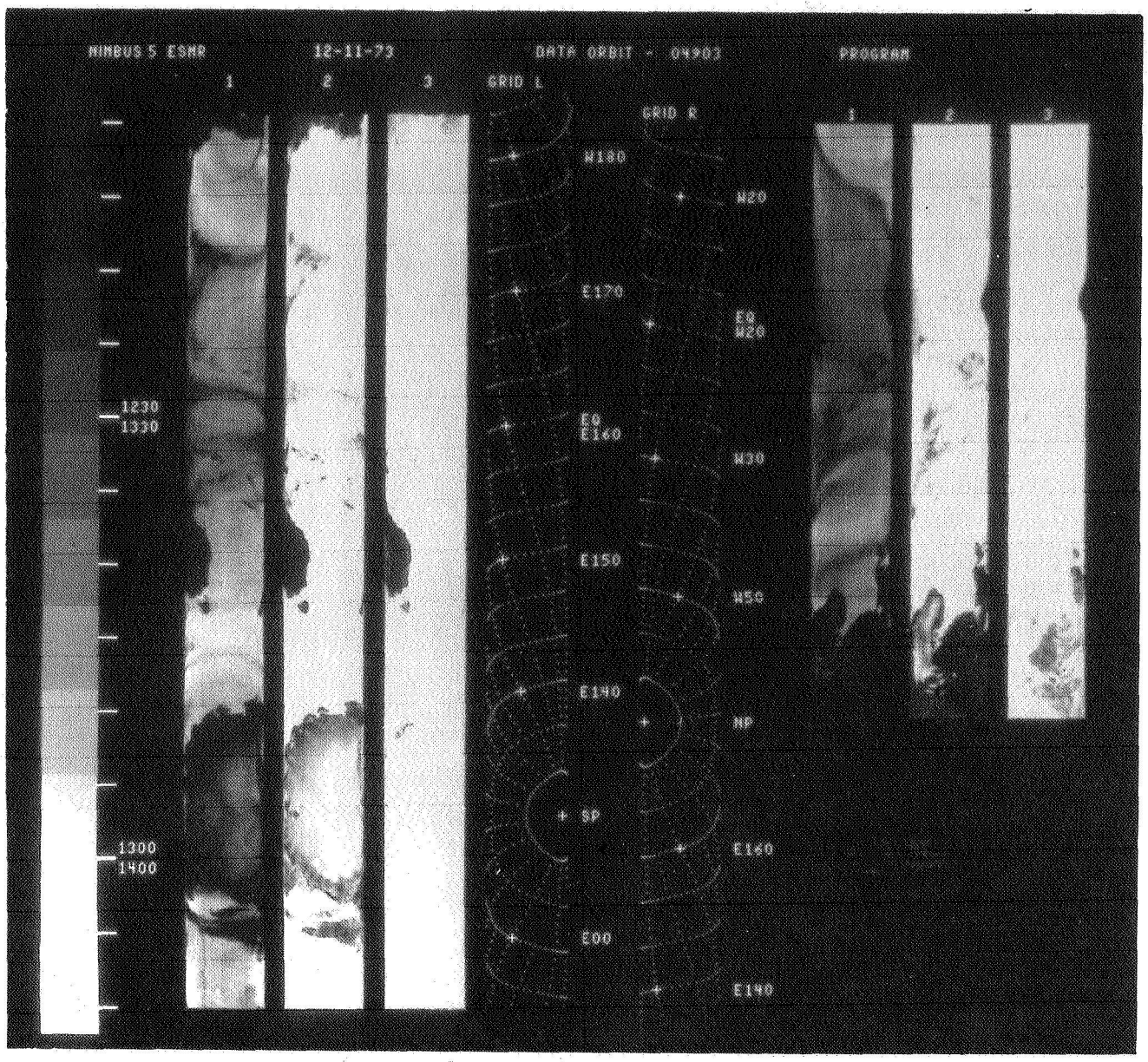

NIMBUS 5 ESMR
12-06-73
DATA ORBIT - 04841
PROGRAM
1
2
3
GRID L
GRID R
+ SP
+ NP
+ W140
E40
+ W150
2130
2230
E30
E0
W160
E0
E20
+ W170
E10
+ W180
E00
+ NP
2200
2300

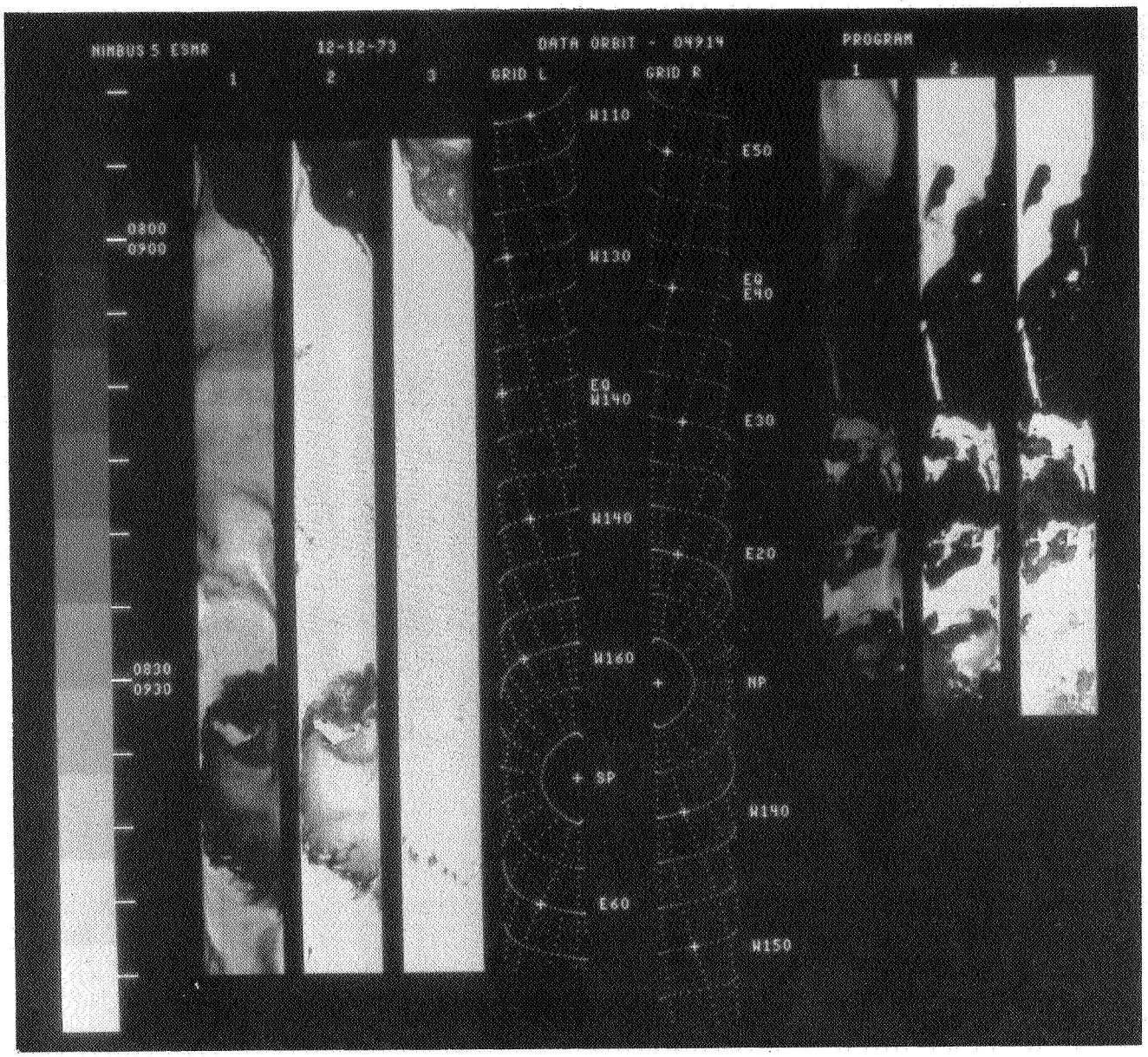

NIMBUS 5 ESMR
12-07-73
DATA ORBIT - 04845
PROGRAM
1
2
3
GRID L
GRID R
W30
EQ
E90
EQ
W30
E30
W90
E70
W110
NP
SP
W70
E110
W100
E100
EQ
W110
0500
0600
0530
0620

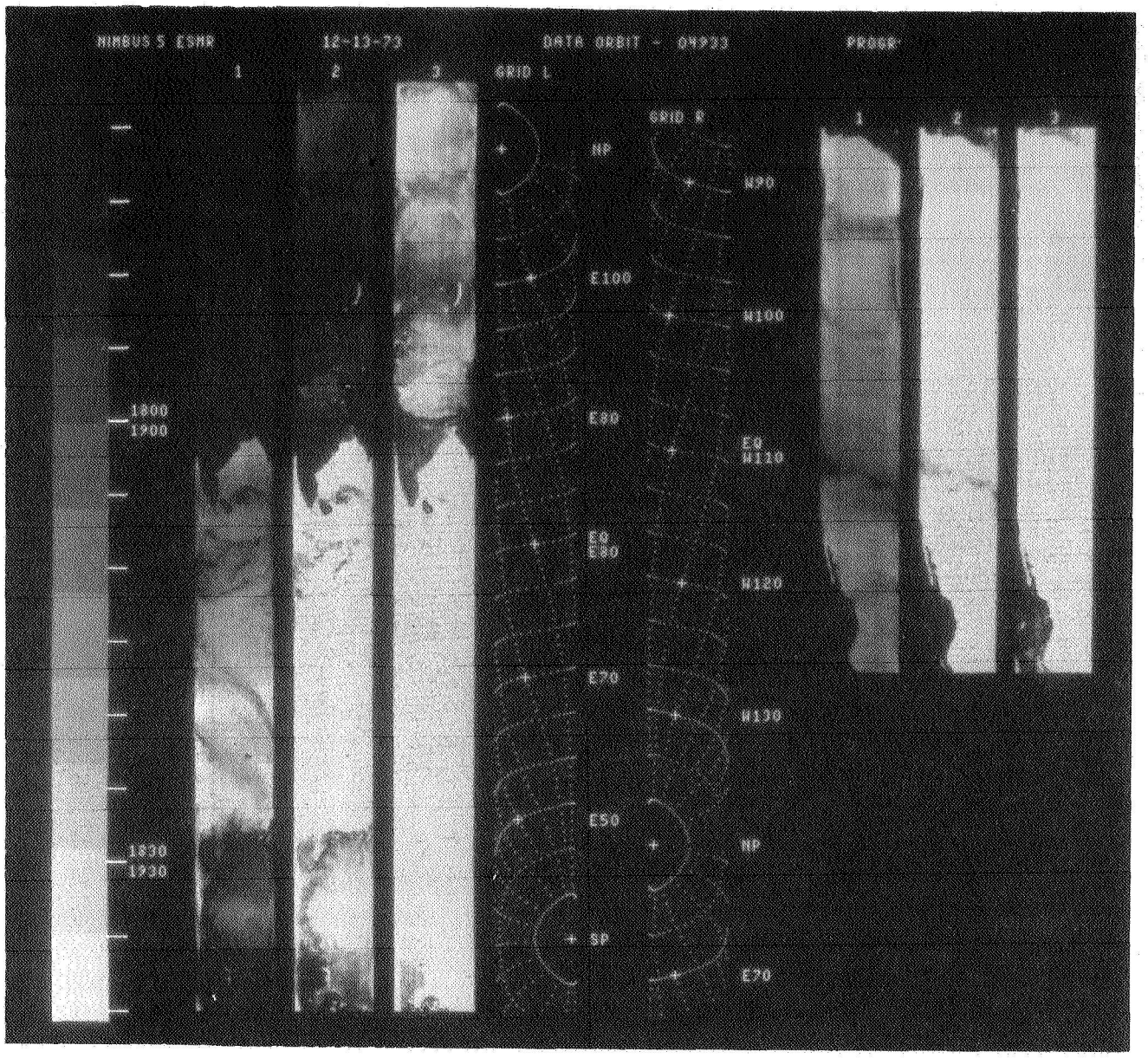

NIMBUS 5 ESMR
12-08-72
DATA ORBIT - 04864
PROGRAM
1
2
3
GRID L
GRID R
1430
1530
1500
1600
E150
W50
E130
EQ
W60
EQ
E130
W70
E120
W80
E100
NP
SP
E120
W40

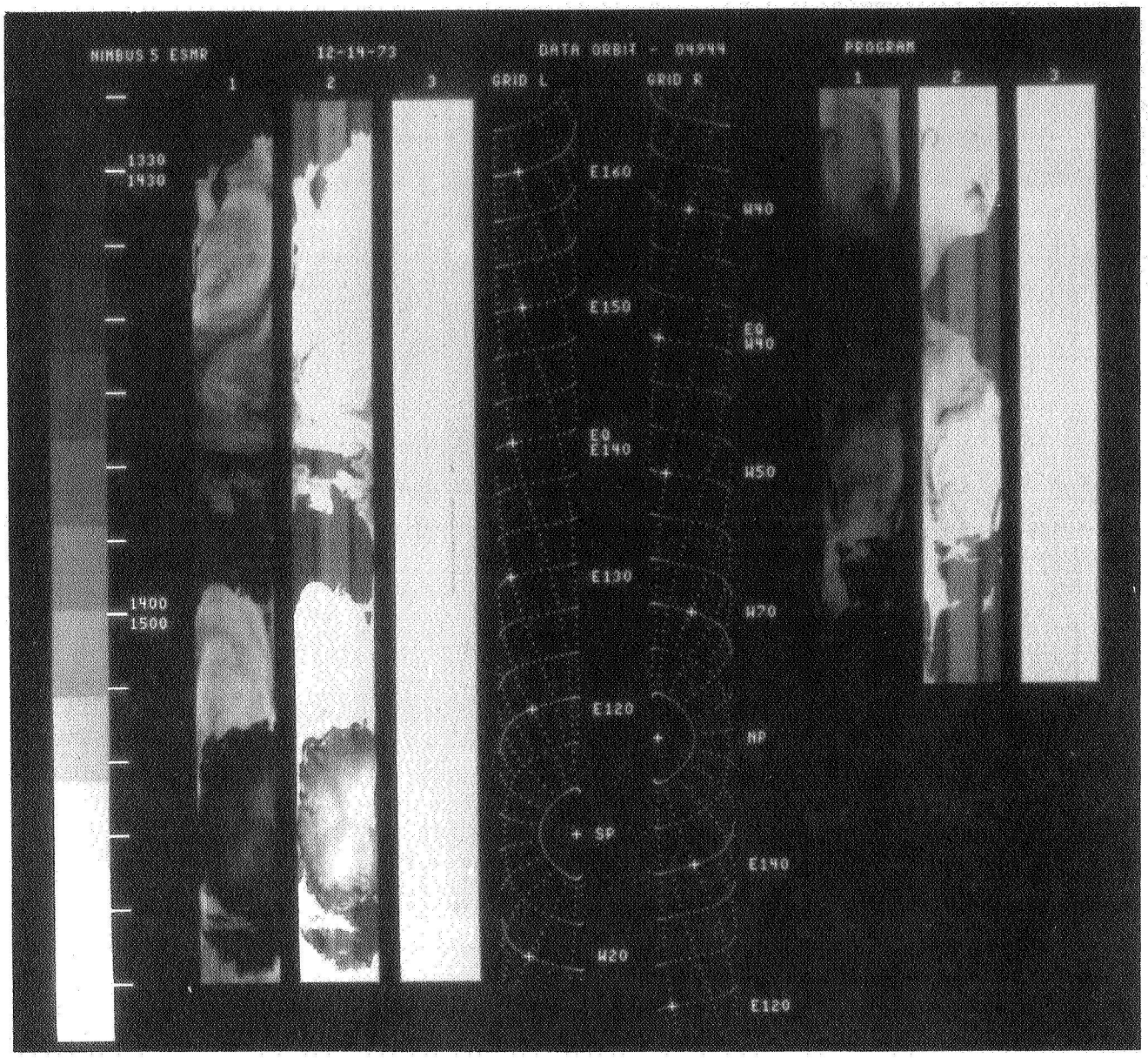

NIMBUS 5 ESMR
12-09-73
DATA ORBIT - 0487?
PROGRAM
1
2
3
GRID L
GRID R
NP
W80
E110
W90
E90
EQ
W100
EQ
E80
W110
E80
W120
E60
NP
SP
E80
1730
1830
1800
1900

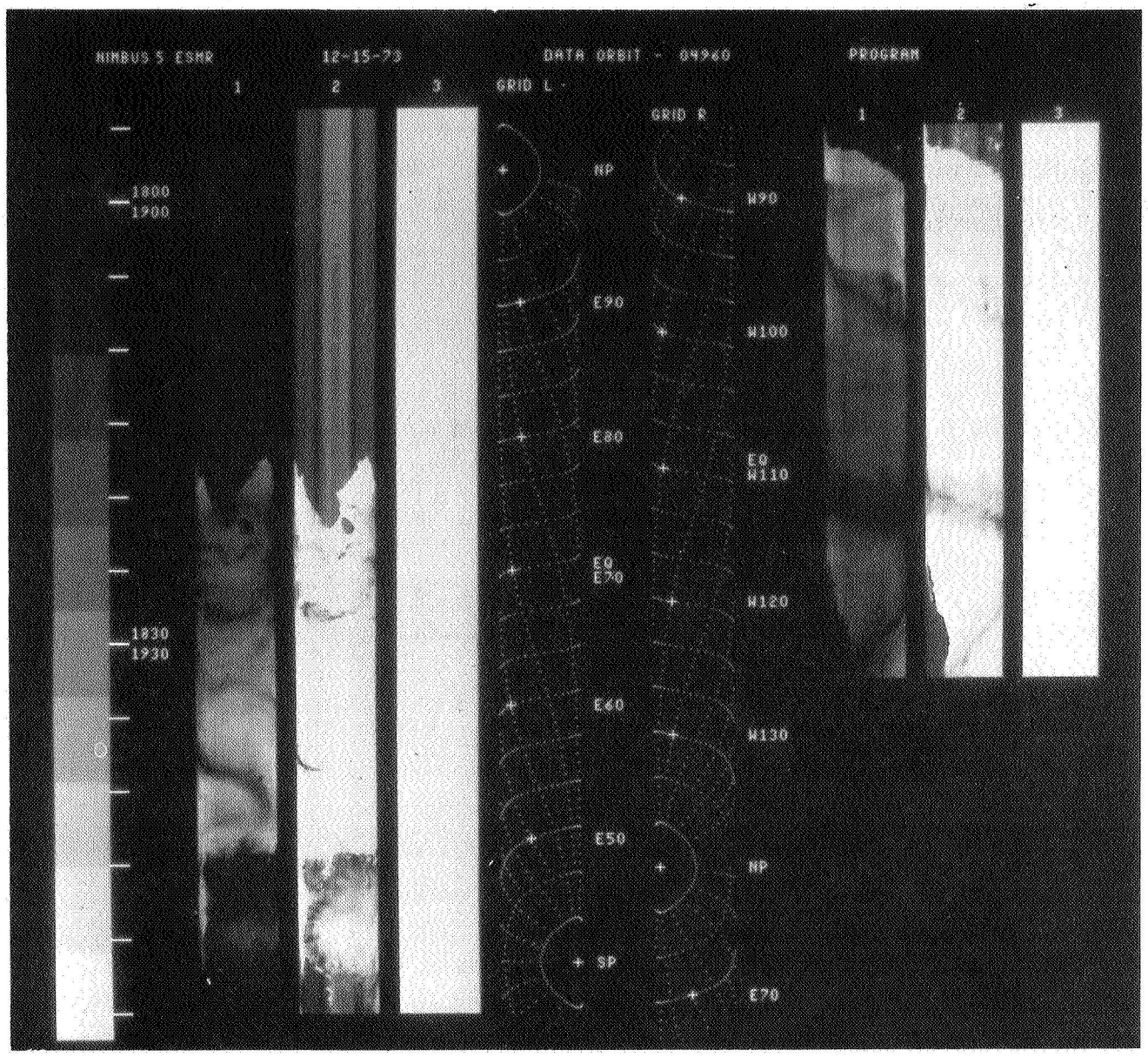

NIMBUS 5 ESMR
12-10-73
DATA ORBIT - 04894
PROGRAM
1
2
3
GRID L
GRID E
2000
2100
2030
2130
NP
E60
E50
E0
E40
E30
E20
SP
W120
W130
E0
W140
W150
W160
NP
E90

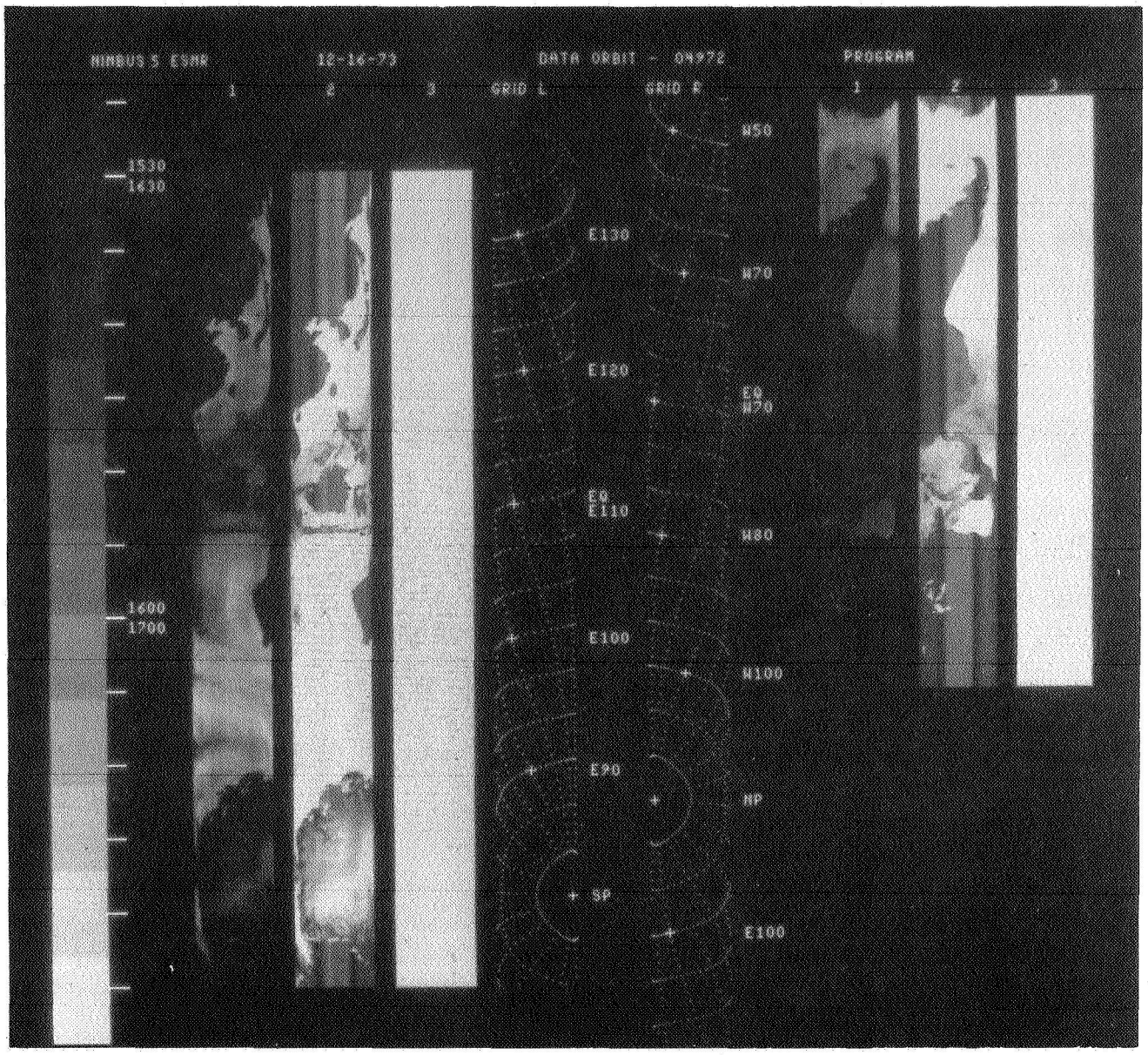

NIMBUS 5 ESMR
12-11-72
DATA ORBIT - 04903
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
W180
W20
E170
EQ
W20
EQ
E160
W30
E150
W50
E140
NP
SP
E160
E00
E140
1230
1330
1300
1400

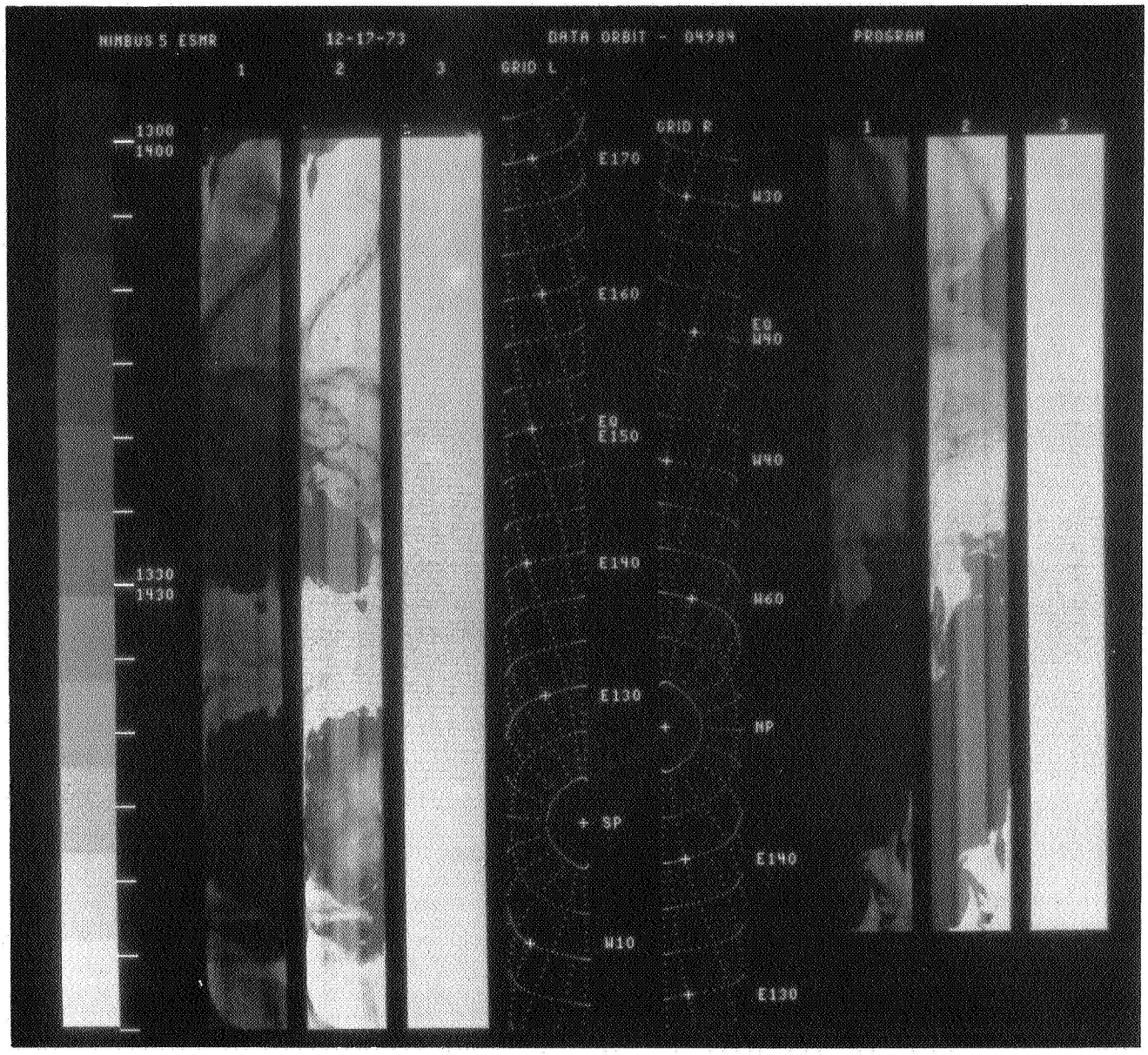

NIMBUS 5 ESMR
12-12-73
1
2
3
0800
0900
0830
0930
DATA ORBIT - 04914
GRID L
GRID R
W110
E50
W130
EQ
E40
EQ
W140
E30
W140
E20
W160
NP
SP
W140
E60
W150
PROGRAM
1
2
3

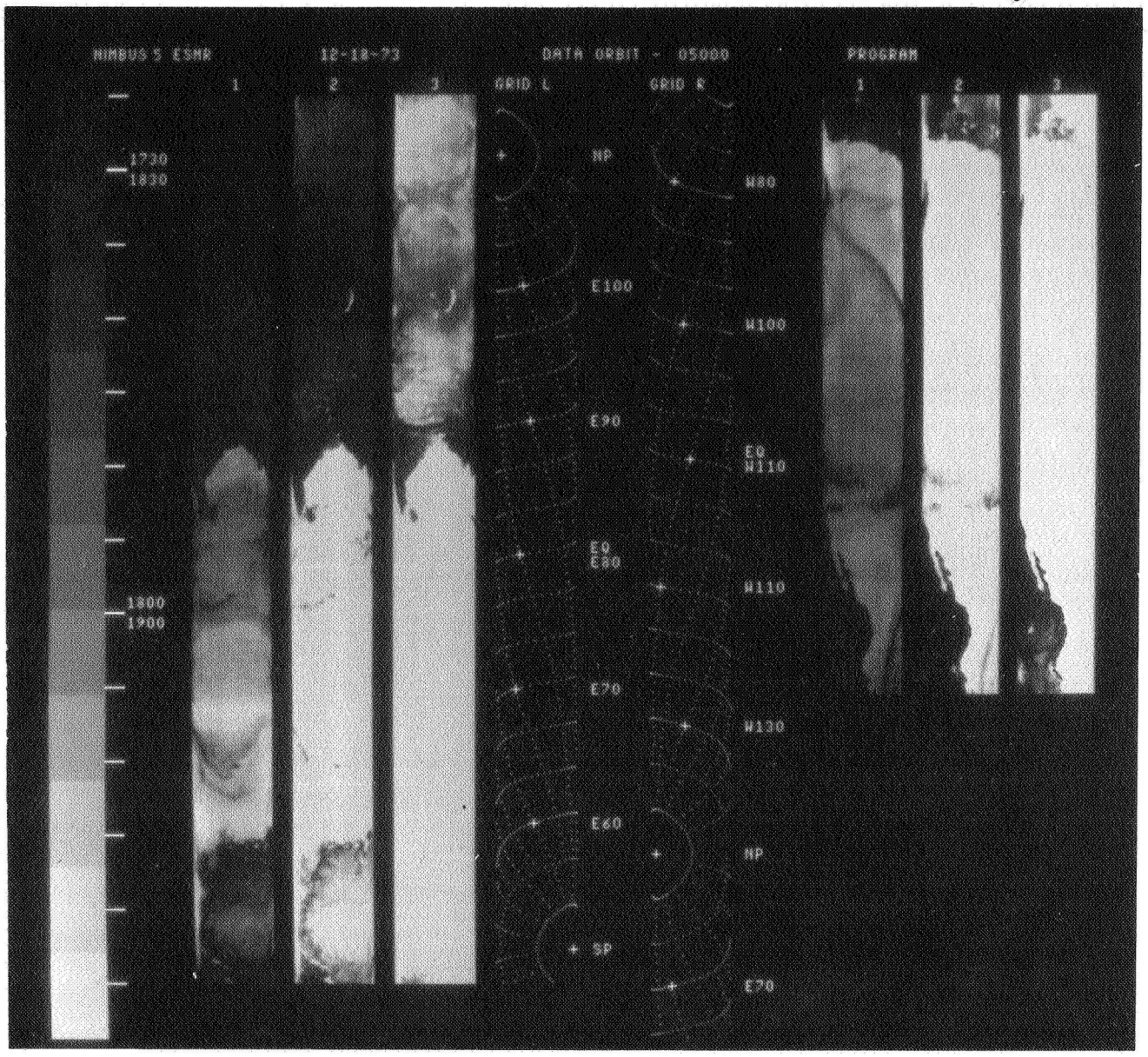

NIMBUS 5 ESMR
12-13-73
ORBIT 04923
1
2
3
GRID L
GRID R
NP
W90
E100
W100
E90
E0
W110
E0
E90
W120
E70
W130
E50
NP
SP
E70
1800
1900
1830
1930

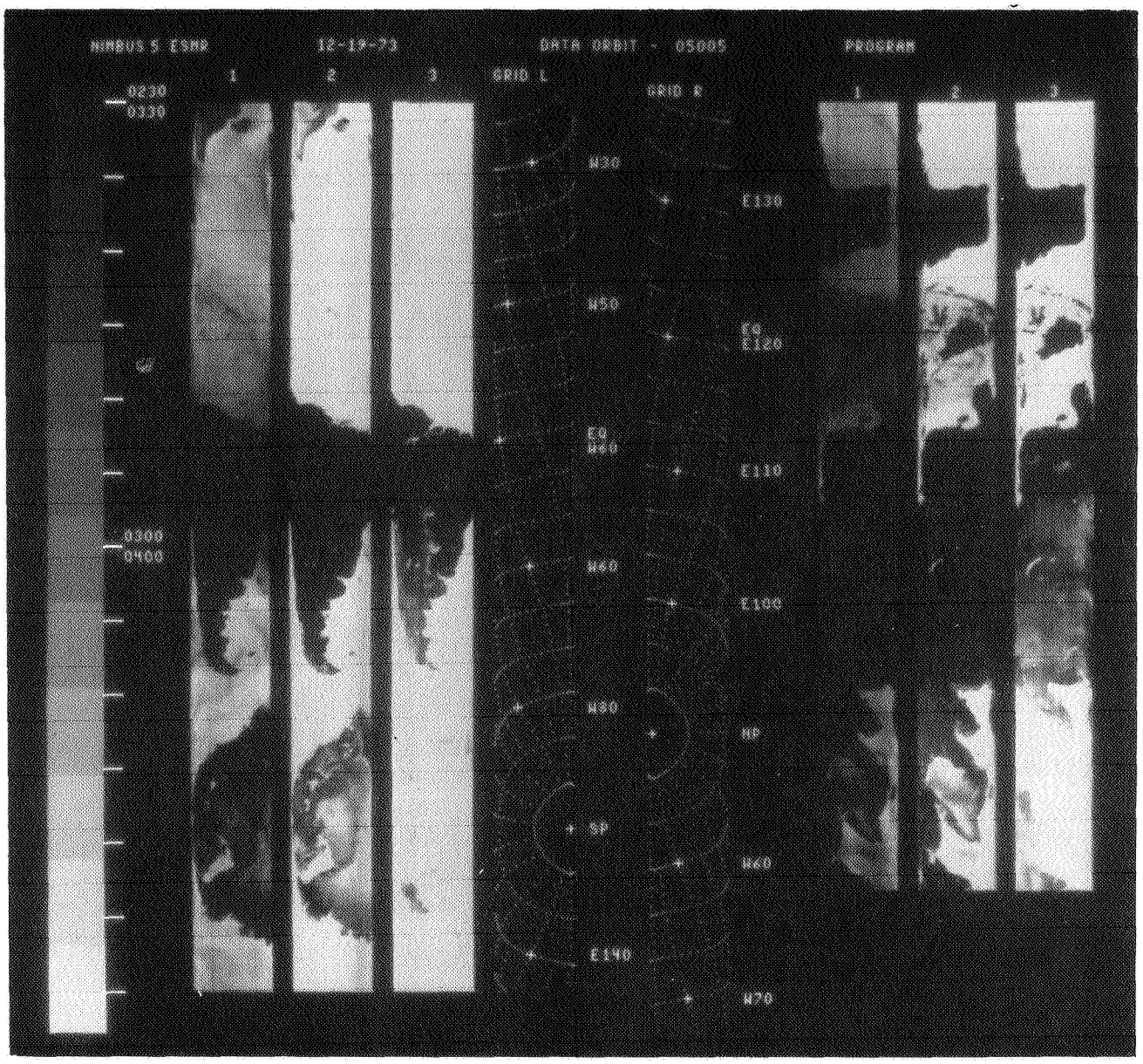

NIMBUS 5 ESMR
12-14-72
DATA ORBIT - 04944
PROGRAM
1
2
3
GRID L
GRID R
1330
1430
1400
1500
E160
W40
E150
EQ
W40
EQ
E140
W50
E130
W70
E120
NP
SP
E140
W20
E120

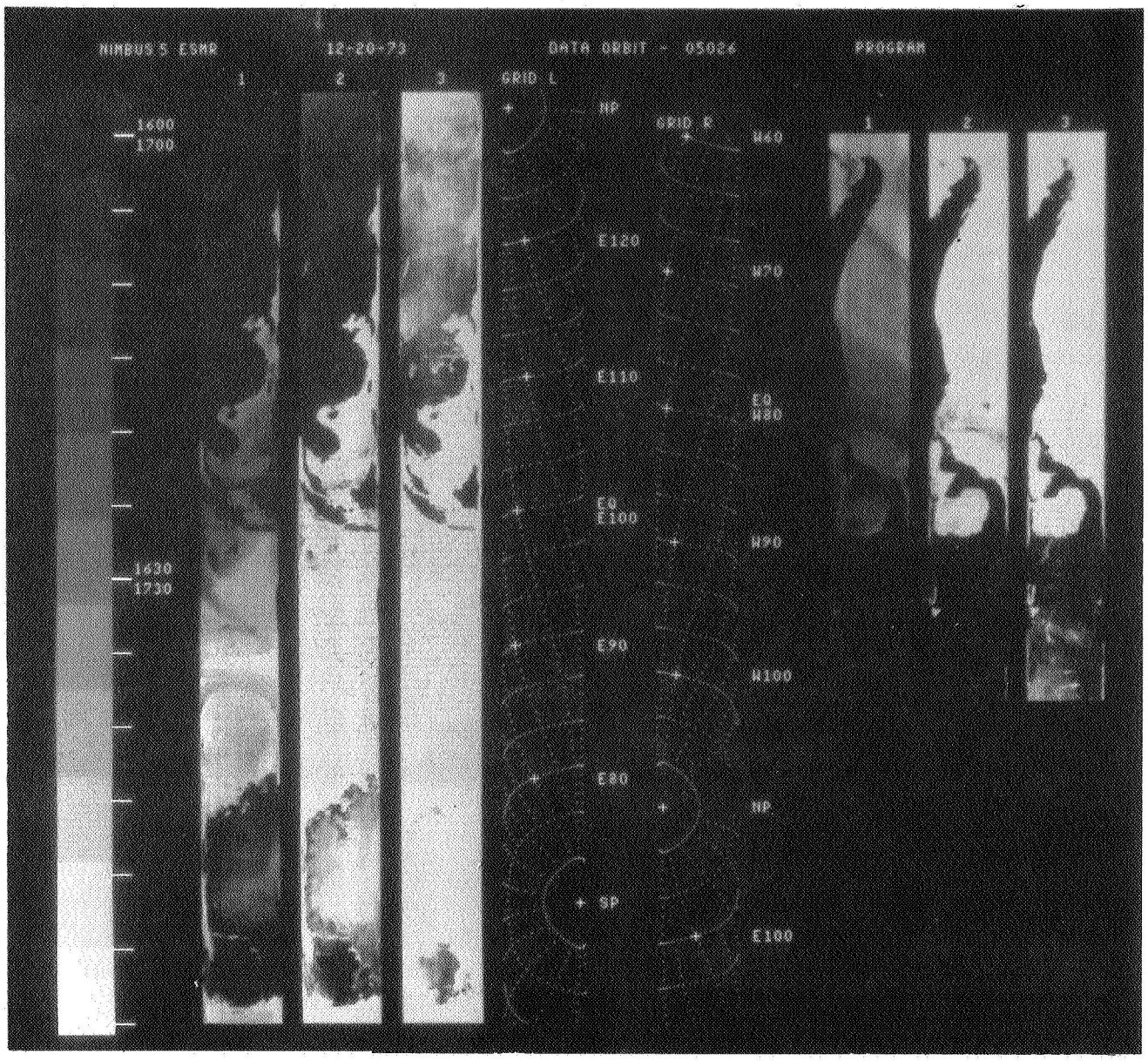

NIMBUS 5 ESMR
12-15-73
DATA ORBIT - 04940
PROGRAM
1
2
3
GRID L
GRID R
1800
1900
1830
1930
NP
W90
E90
W100
E80
EQ
W110
EQ
E70
W120
E60
W130
E50
NP
SP
E70

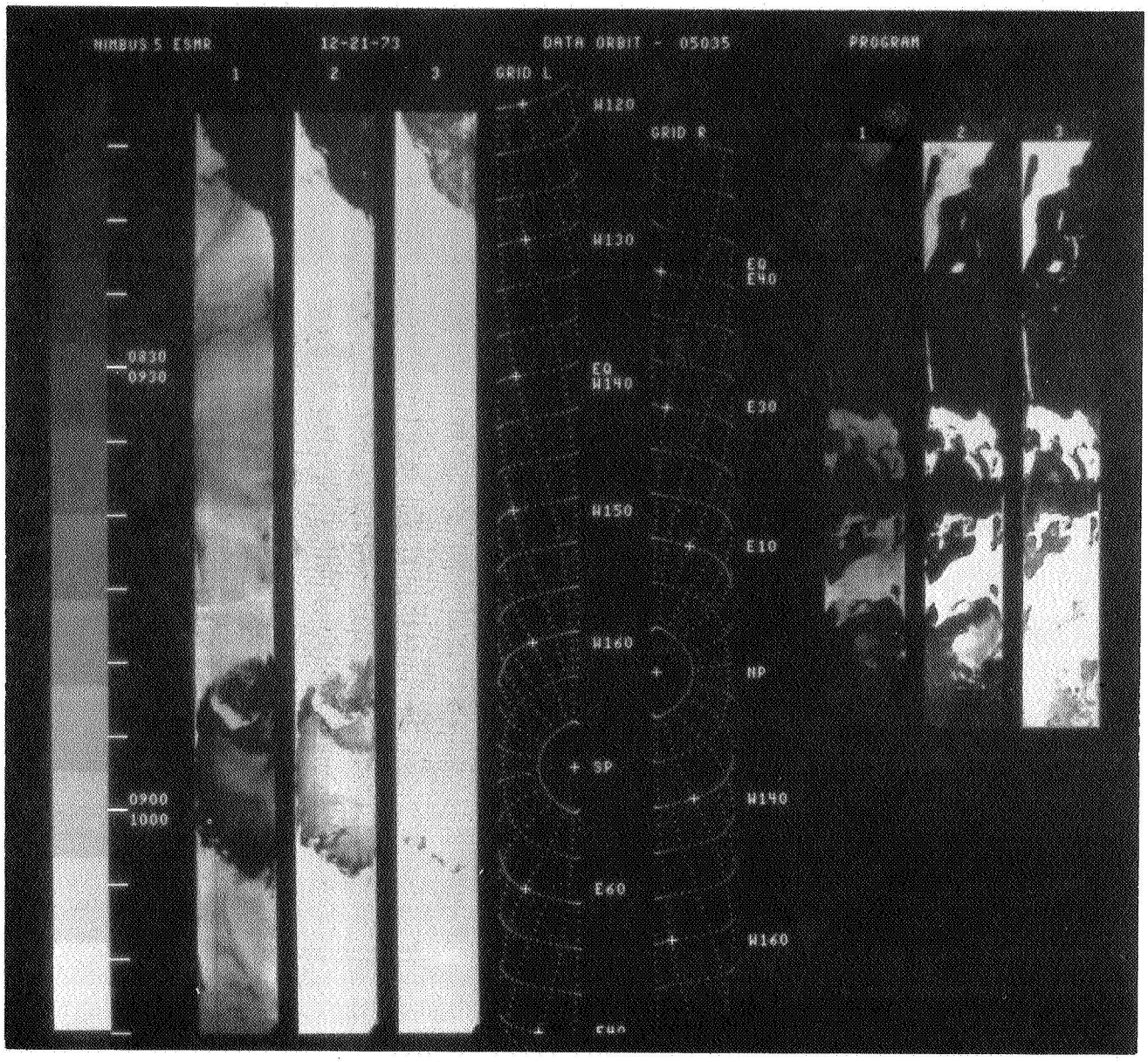

NIMBUS 5 ESMR
12-14-73
DATA ORBIT - 04972
PROGRAM
1
2
3
GRID L
GRID R
W50
E130
W70
E120
EQ
W70
EQ
E110
W80
E100
N100
E90
NP
SP
E100
1530
1430
1400
1700

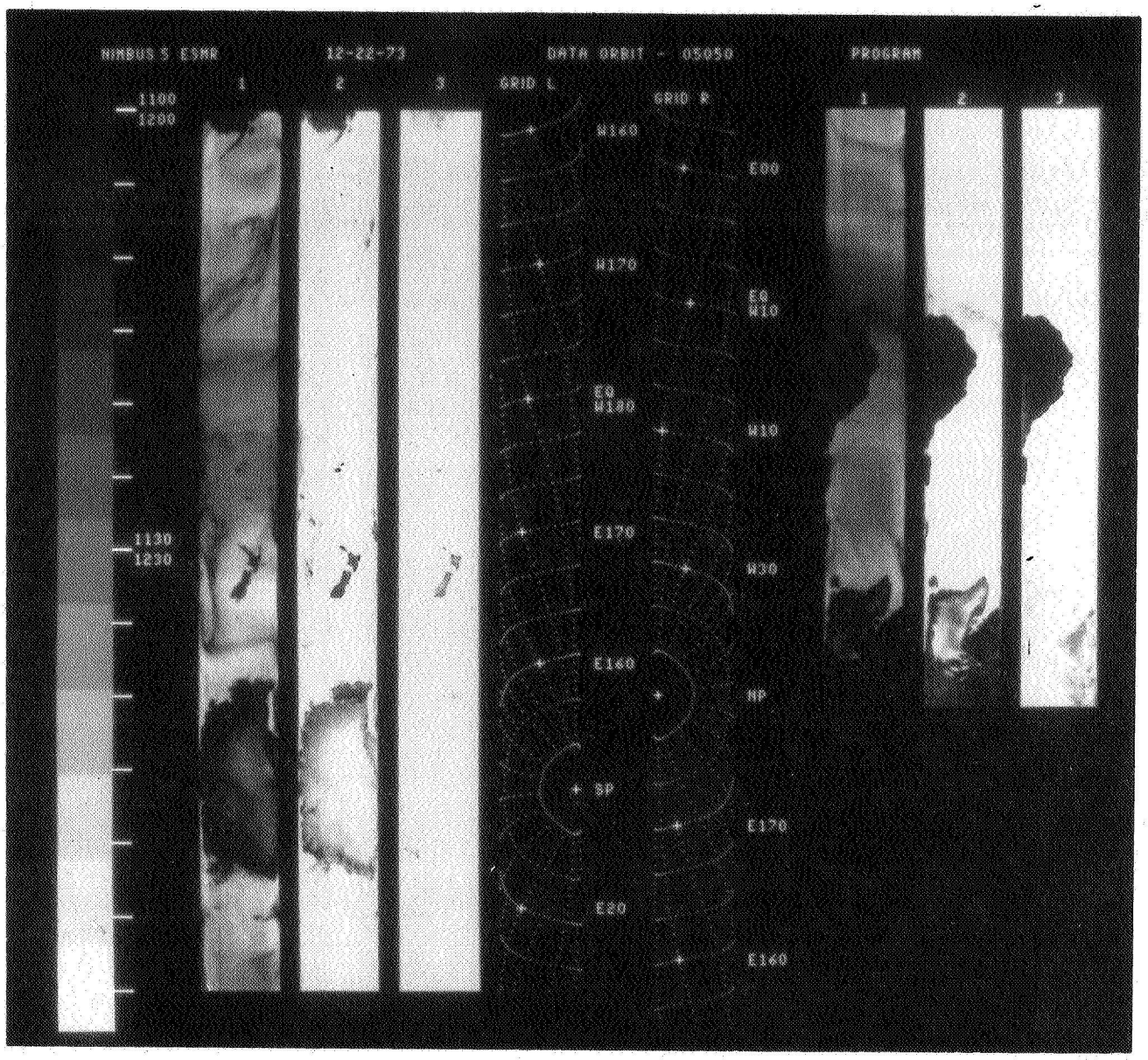

NIMBUS 5 ESMR
12-17-73
DATA ORBIT - 04284
PROGRAM
1
2
3
GRID L
GRID R
1300
1400
1330
1430
E170
W30
E160
EQ
W40
EQ
E150
W40
E140
W60
E130
NP
SP
E140
W10
E130

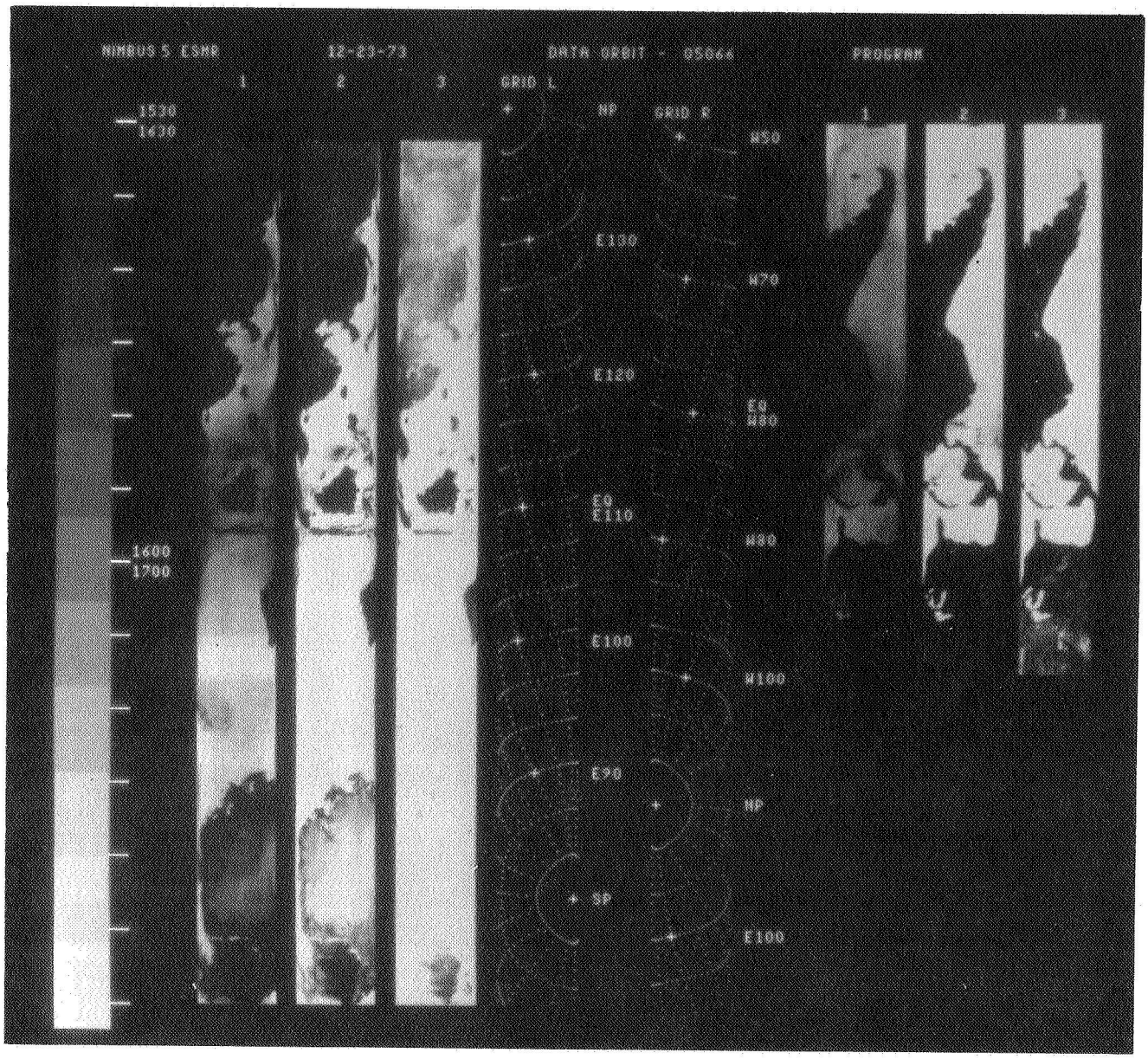

NIMBUS 5 ESMR
12-18-73
DATA ORBIT - 05000
PROGRAM
1
2
3
GRID L
GRID R
1730
1830
1800
1900
NP
W80
E100
W100
E90
EQ
W110
EQ
E80
W110
E70
W130
E60
NP
SP
E70

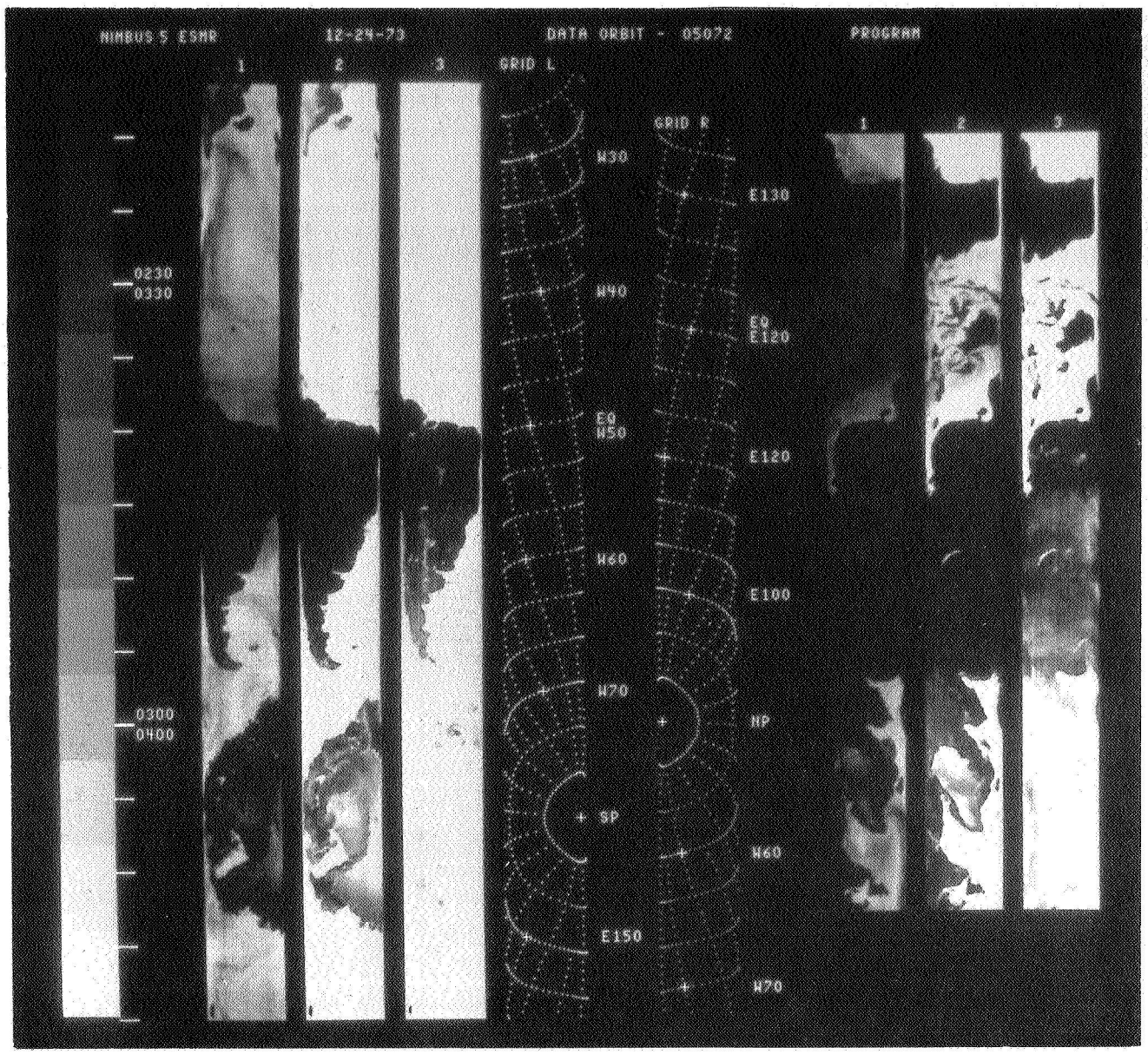

NIMBUS 5 ESMR
12-19-72
DATA ORBIT - 05005
PROGRAM
1
2
3
GRID L
GRID R
0230
0330
0300
0400
W30
E130
W50
EQ
E120
EQ
W60
E110
W60
E100
W80
NP
SP
W60
E140
W70

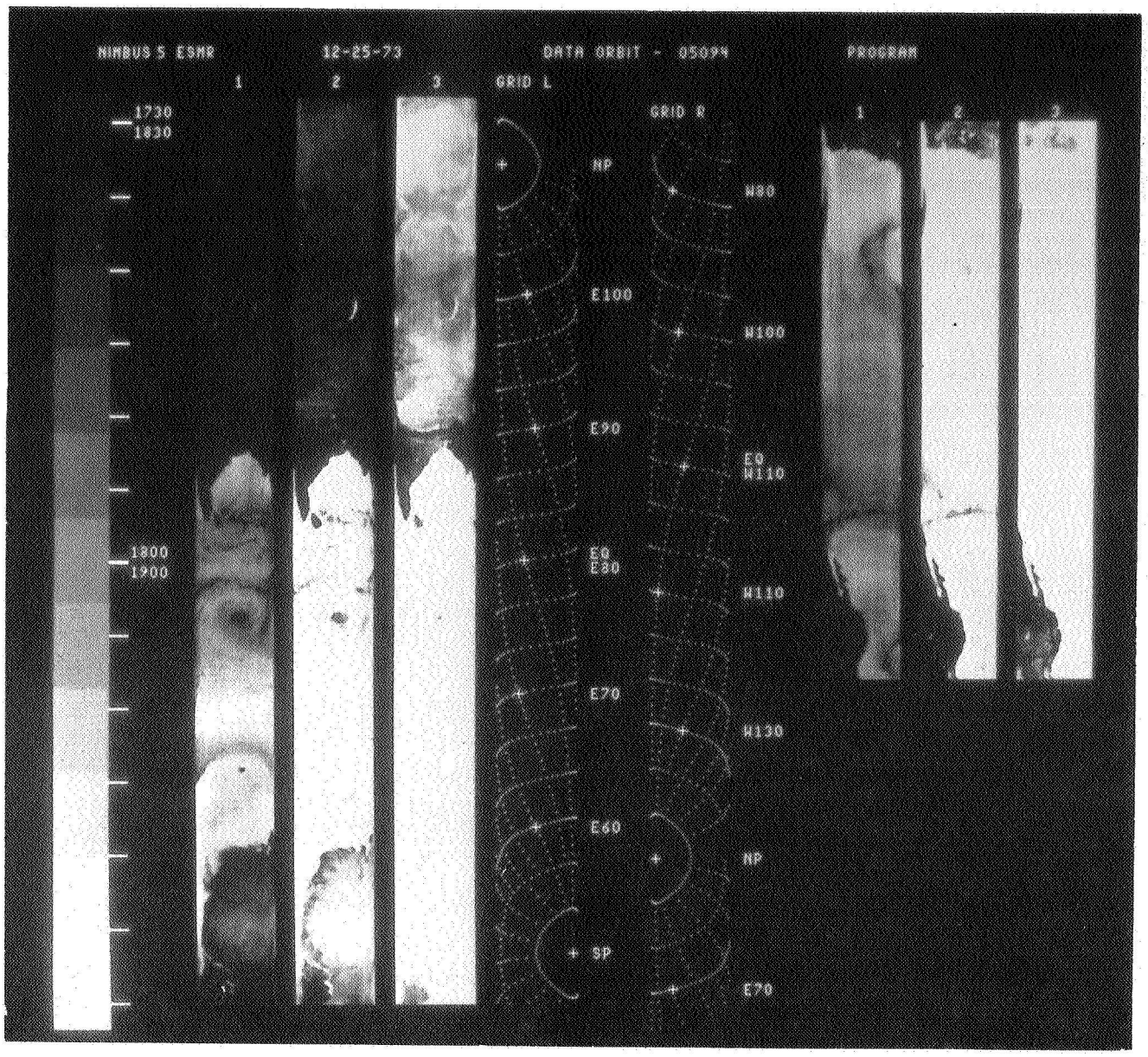

NIMBUS 5 ESMR
12-20-73
DATA ORBIT - 05024
PROGRAM
1
2
3
GRID L
GRID K
NP
W40
E120
W70
E110
E0
W80
E0
E100
W90
E90
W100
E80
NP
SP
E100
1600
1700
1430
1730

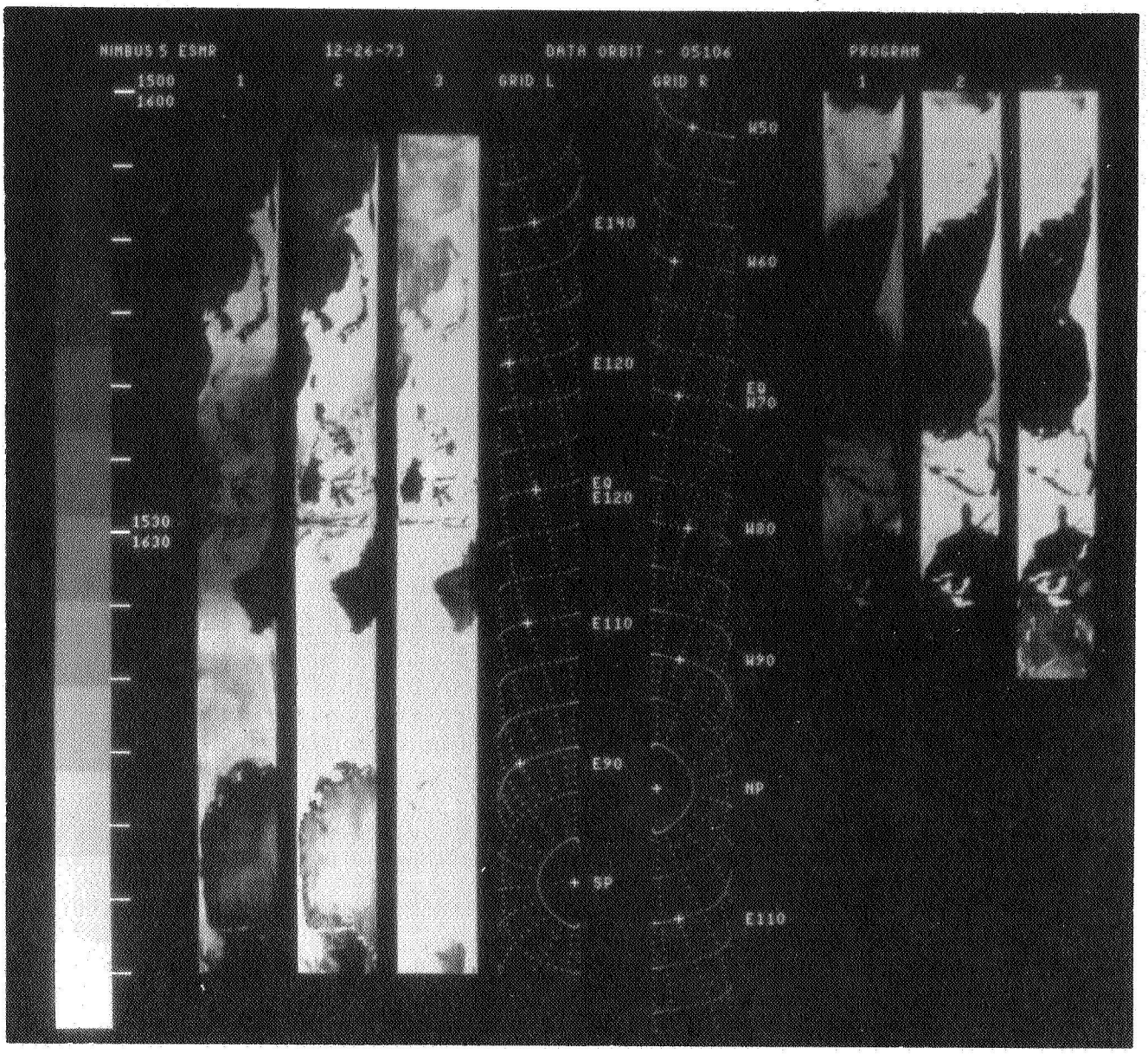

NIMBUS 5 ESMR
12-21-72
DATA ORBIT - 05035
PROGRAM
1
2
3
GRID L
GRID R
W120
W130
EQ
E40
EQ
W140
E30
W150
E10
W160
NP
SP
W140
E60
W160
0830
0930
0900
1000

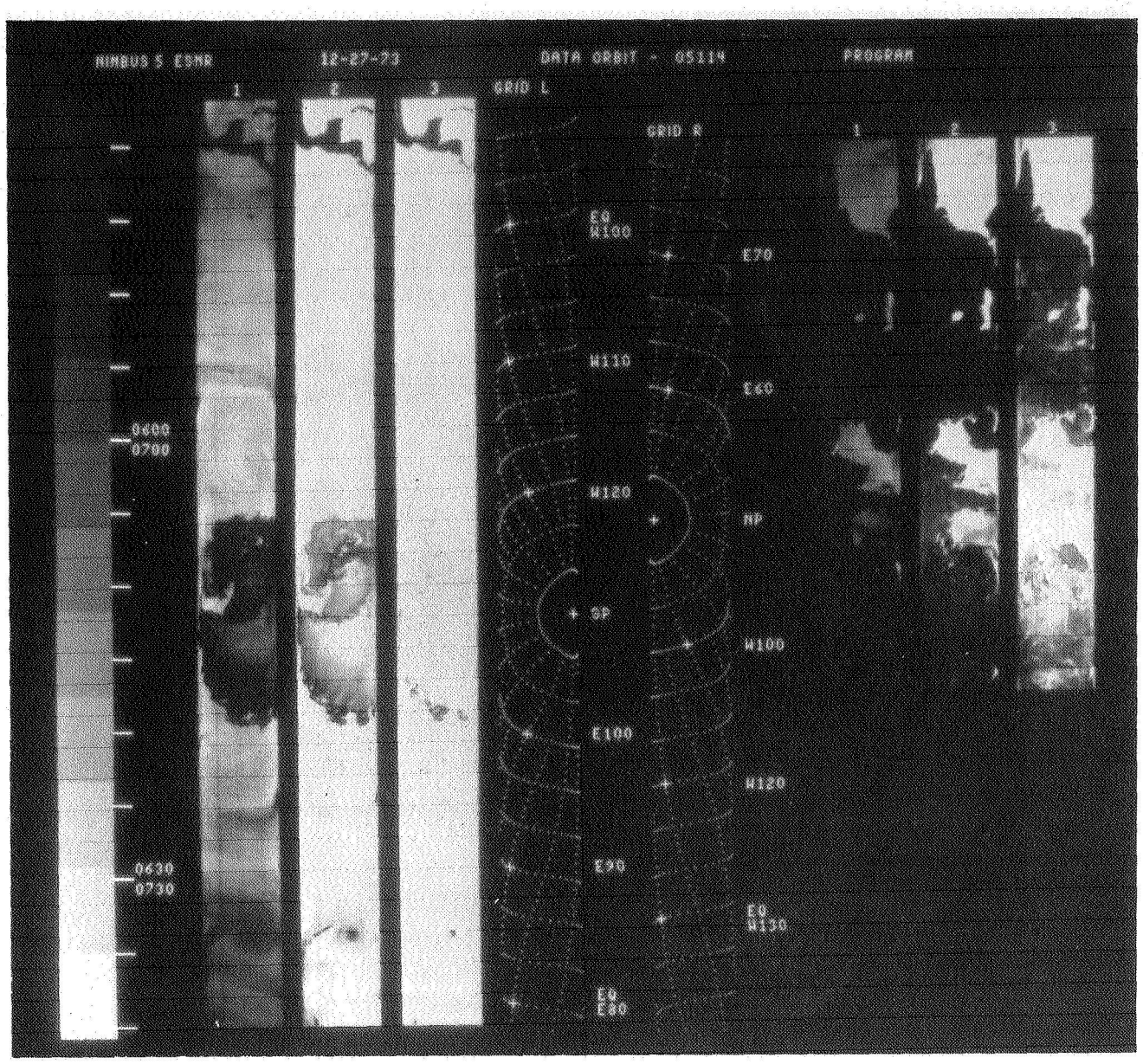

NIMBUS 5 ESMR
12-22-73
DATA ORBIT - 05050
PROGRAM
1
2
3
GRID L
GRID R
1100
1200
1130
1230
W140
E00
W170
E0
W10
E0
W180
W10
E170
W30
E160
MP
SP
E170
E20
E160

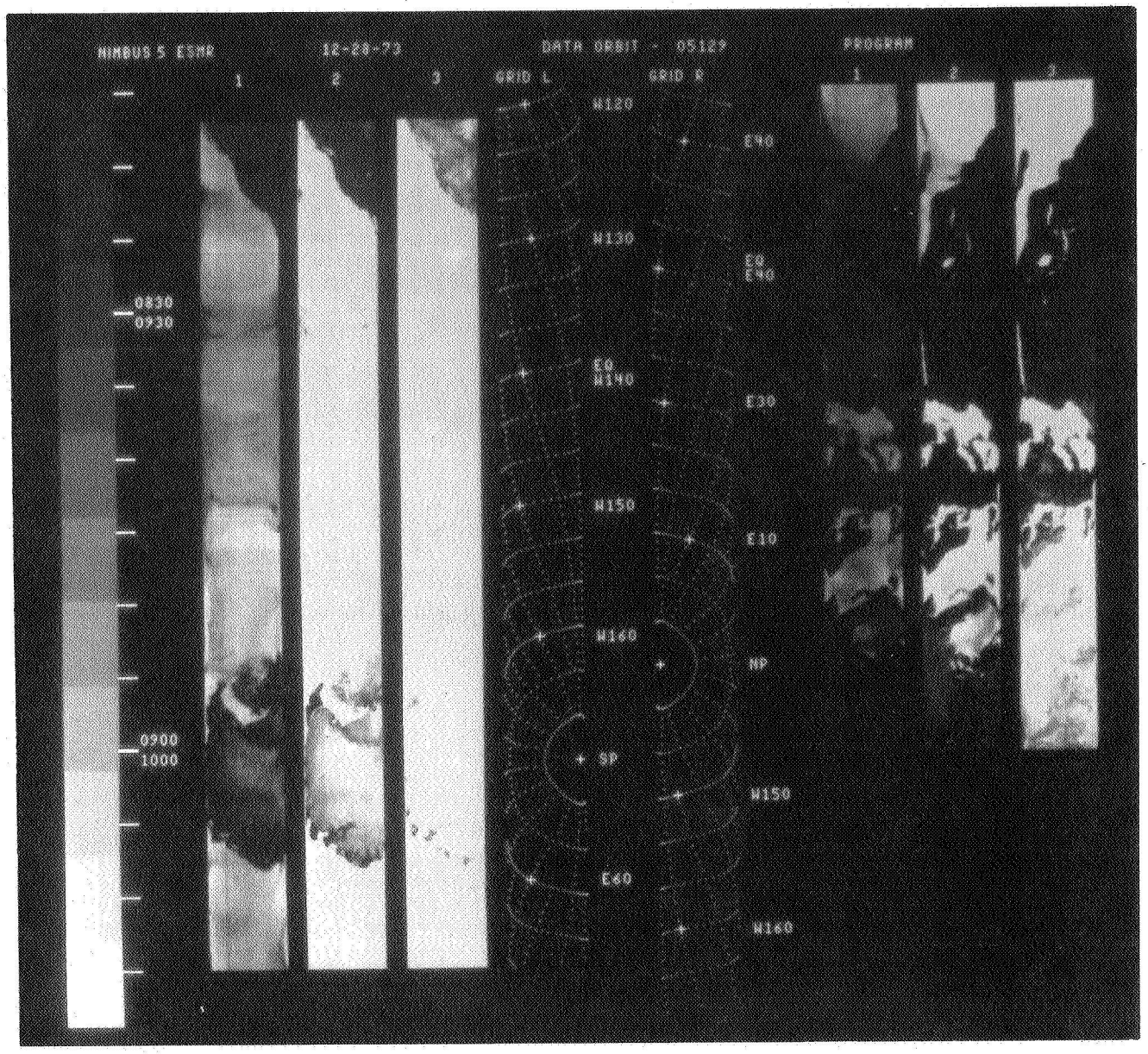

NIMBUS 5 ESMR
12-23-73
DATA ORBIT - 05044
PROGRAM
1
2
3
GRID L
GRID E
NP
1530
1630
1400
1700
E130
W70
E120
EQ
W80
EQ
E110
W90
E100
W100
E90
NP
SP
E100

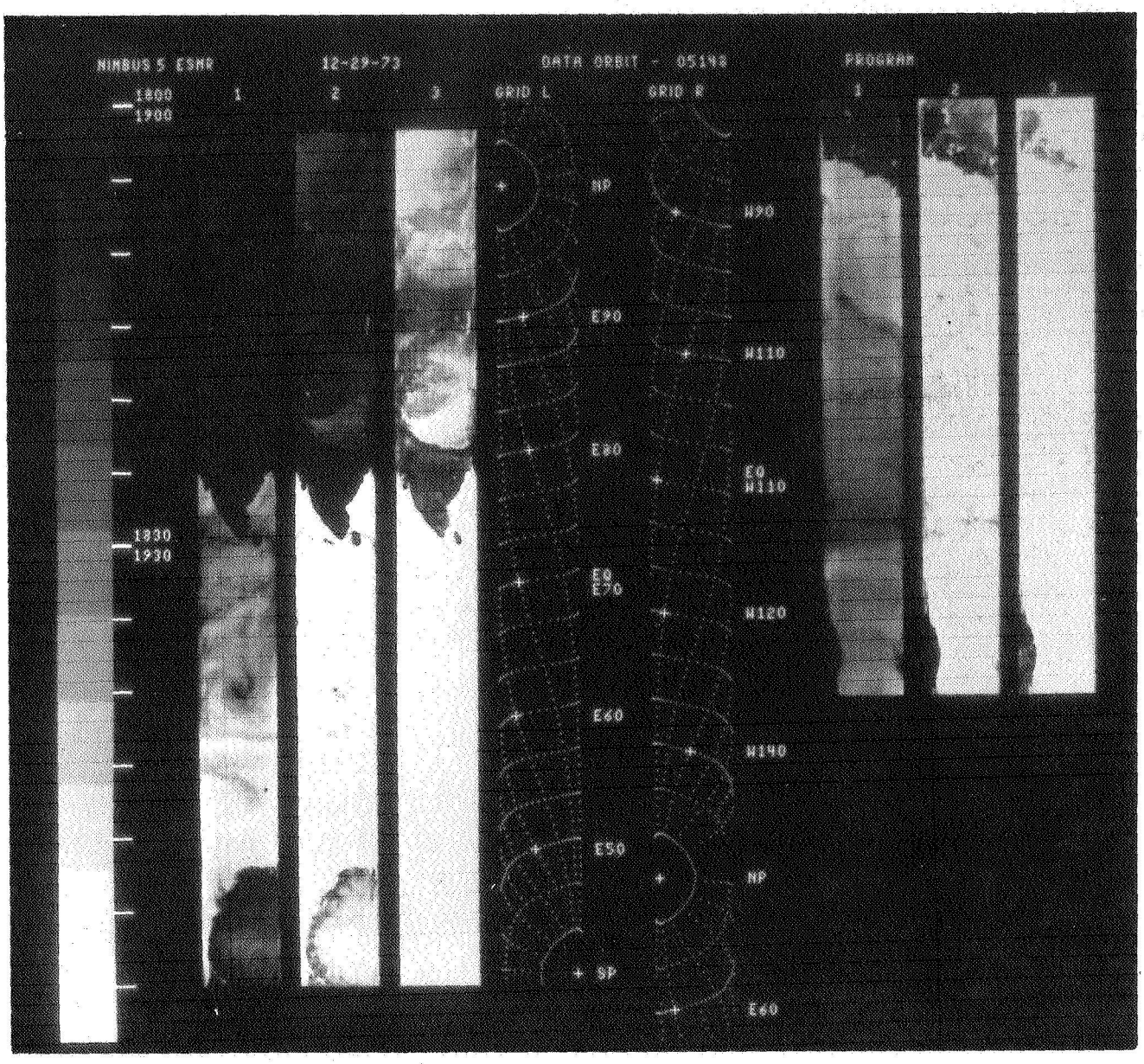

NIMBUS 5 ESMR
12-24-73
DATA ORBIT - 05072
PROGRAM
1
2
3
GRID L
GRID R
0230
0330
0300
0400
W30
W40
EQ
W50
W60
W70
SP
E150
E130
EQ
E120
E120
E100
NP
W60
W70

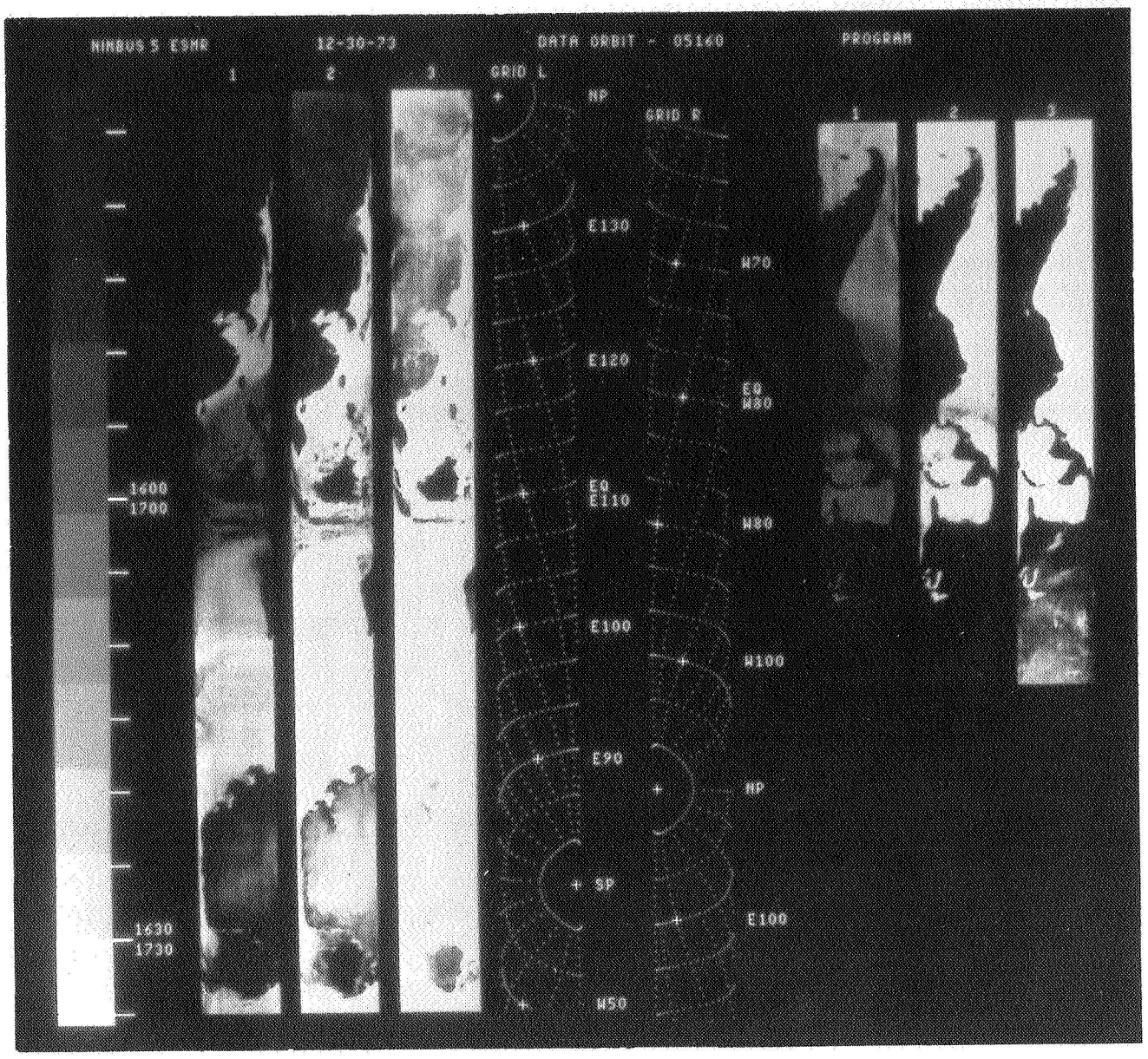

NIMBUS 5 ESMR
12-25-73
DATA ORBIT - 05094
PROGRAM
1
2
3
GRID L
GRID R
1730
1830
1800
1900
NP
E100
E90
EQ
E80
E70
E60
SP
W30
W100
EQ
W110
W110
W130
NP
E70

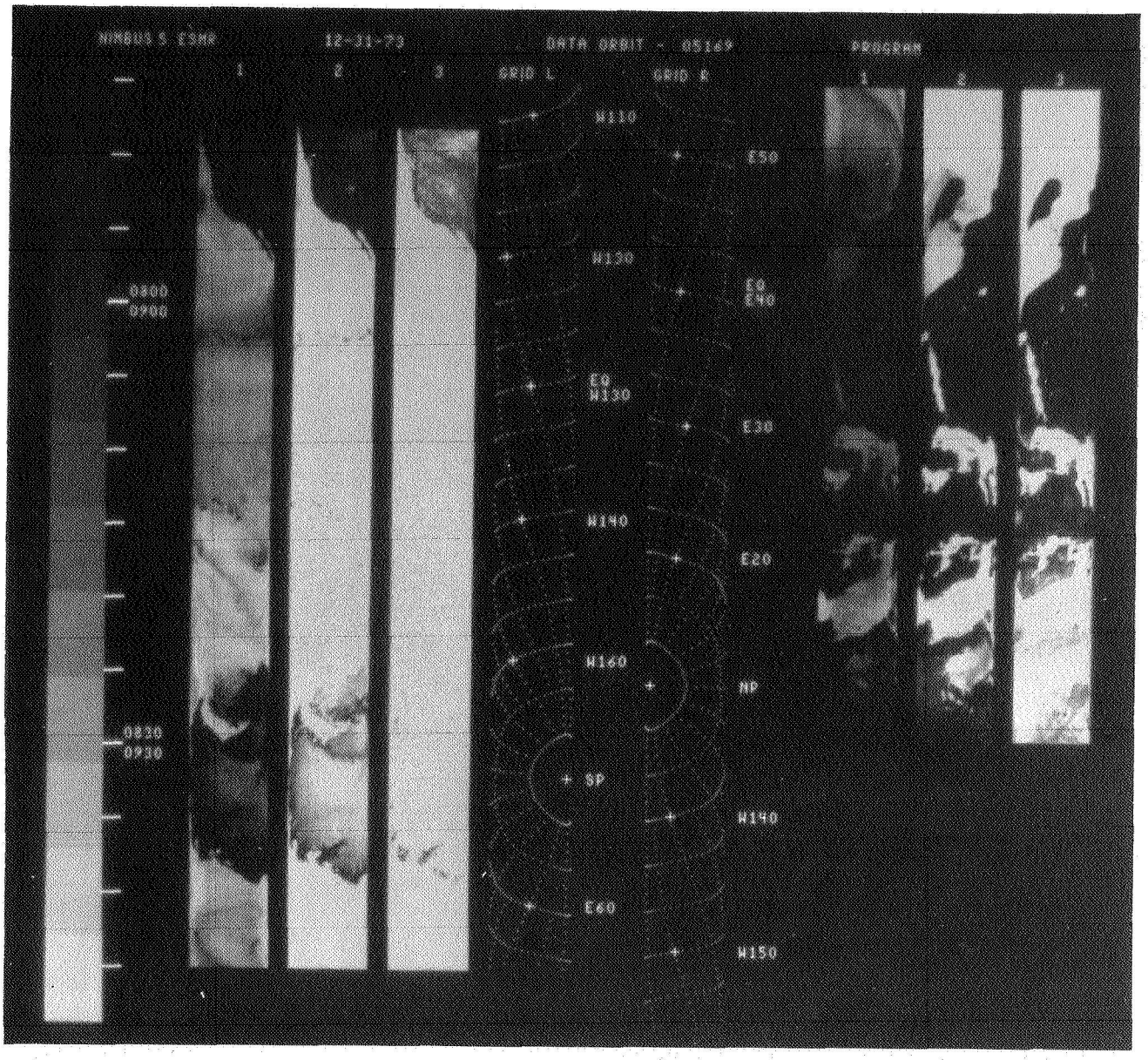

NIMBUS 5 ESMR
12-24-73
DATA ORBIT - 05104
PROGRAM
1500
1400
1530
1630
1
2
3
GRID L
GRID R
W50
E140
W40
E120
E0
W30
E0
E120
W30
E110
W20
E90
WP
SP
E110

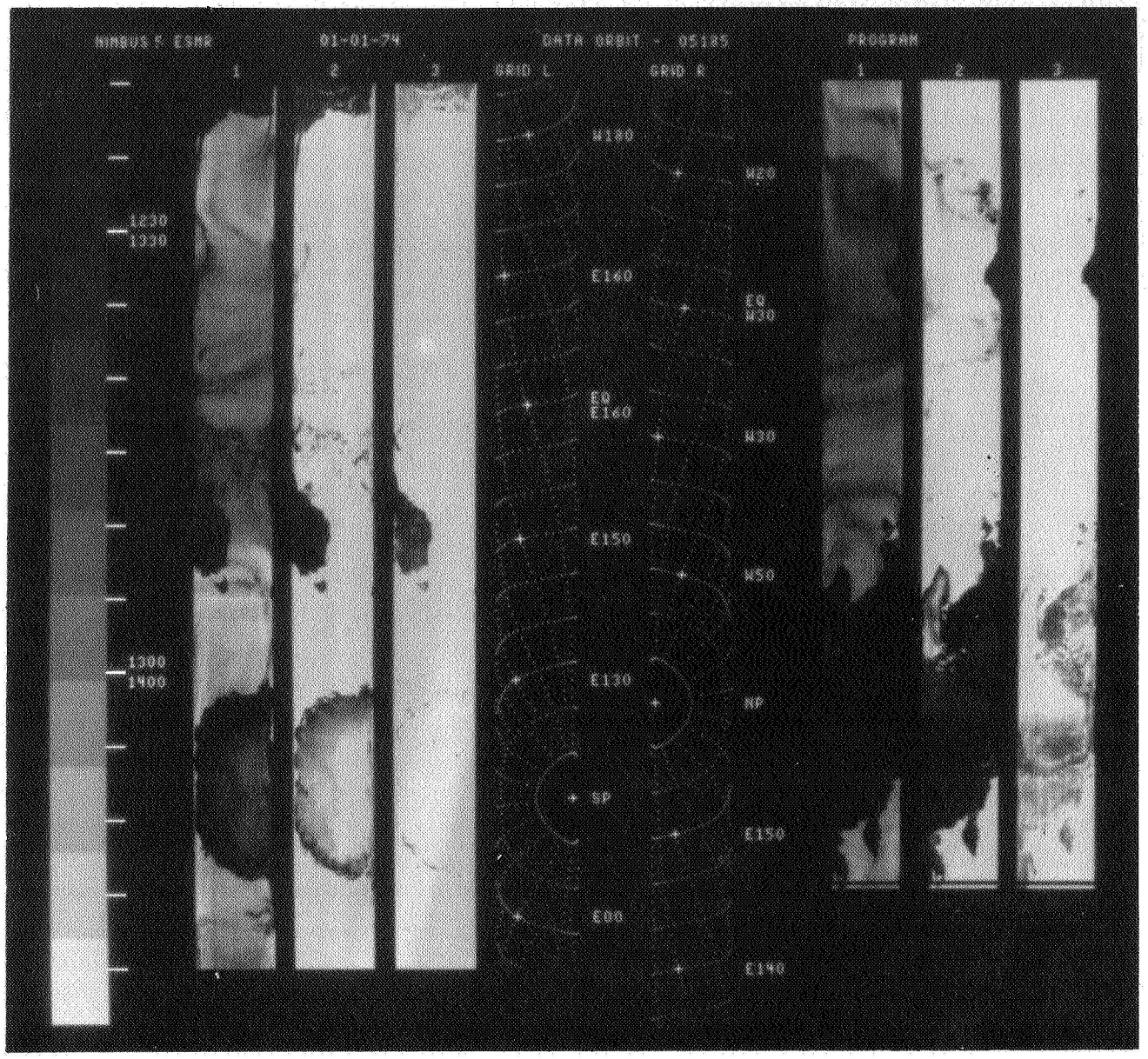

NIMBUS 5 ESMR
12-27-73
DATA ORBIT - 05114
PROGRAM
1
2
3
GRID L
GRID R
EQ
W100
E70
W110
E60
W120
NP
SP
W100
E100
W120
E90
EQ
W130
EQ
E80
0600
0700
0630
0730

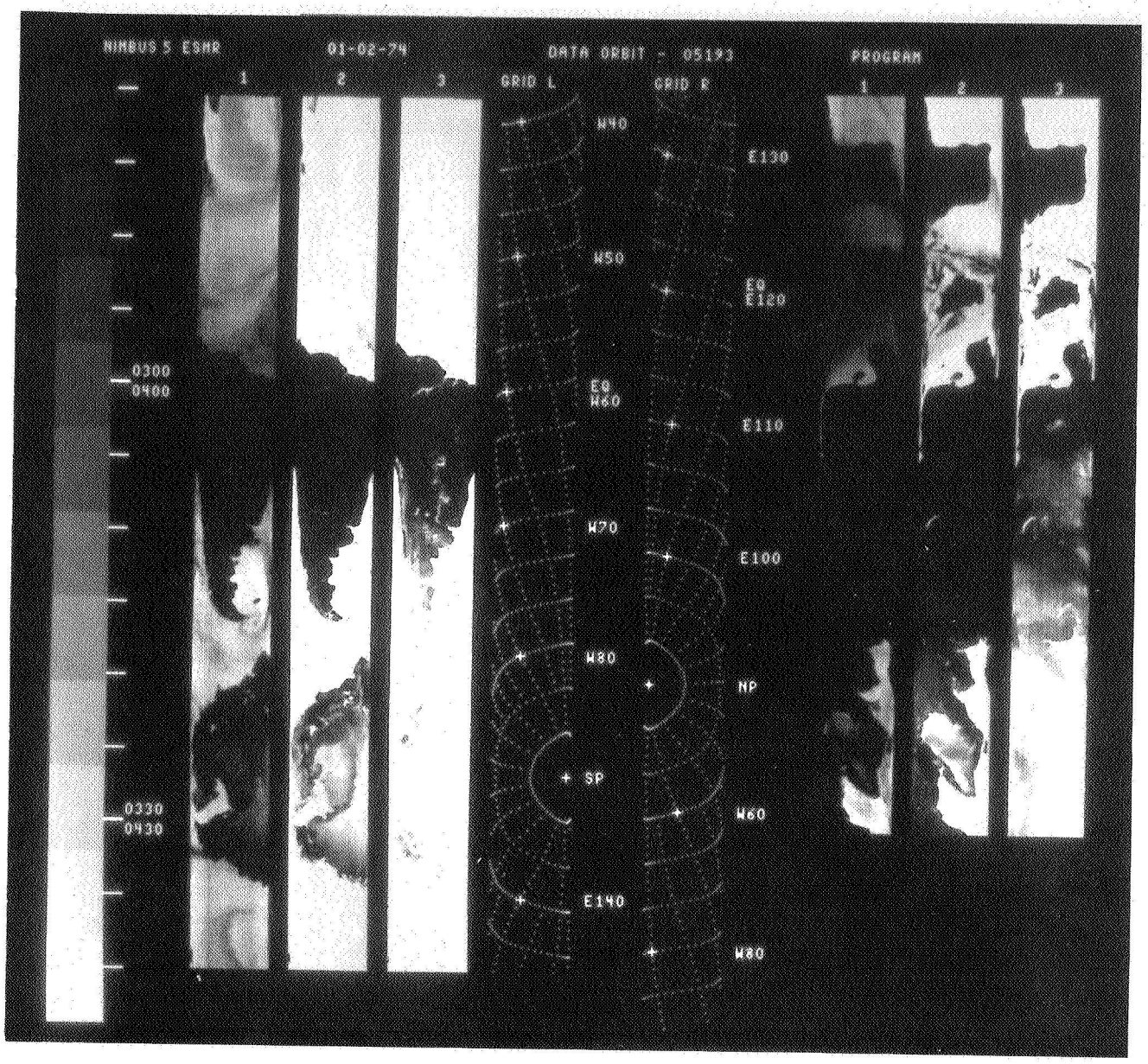

NIMBUS 5 ESMR
12-28-72
DATA ORBIT - 05129
PROGRAM
1
2
3
GRID L
GRID R
W120
E40
W130
EQ
E40
EQ
W140
E30
W150
E10
W160
NP
SP
W150
E60
W160
0830
0930
0900
1000

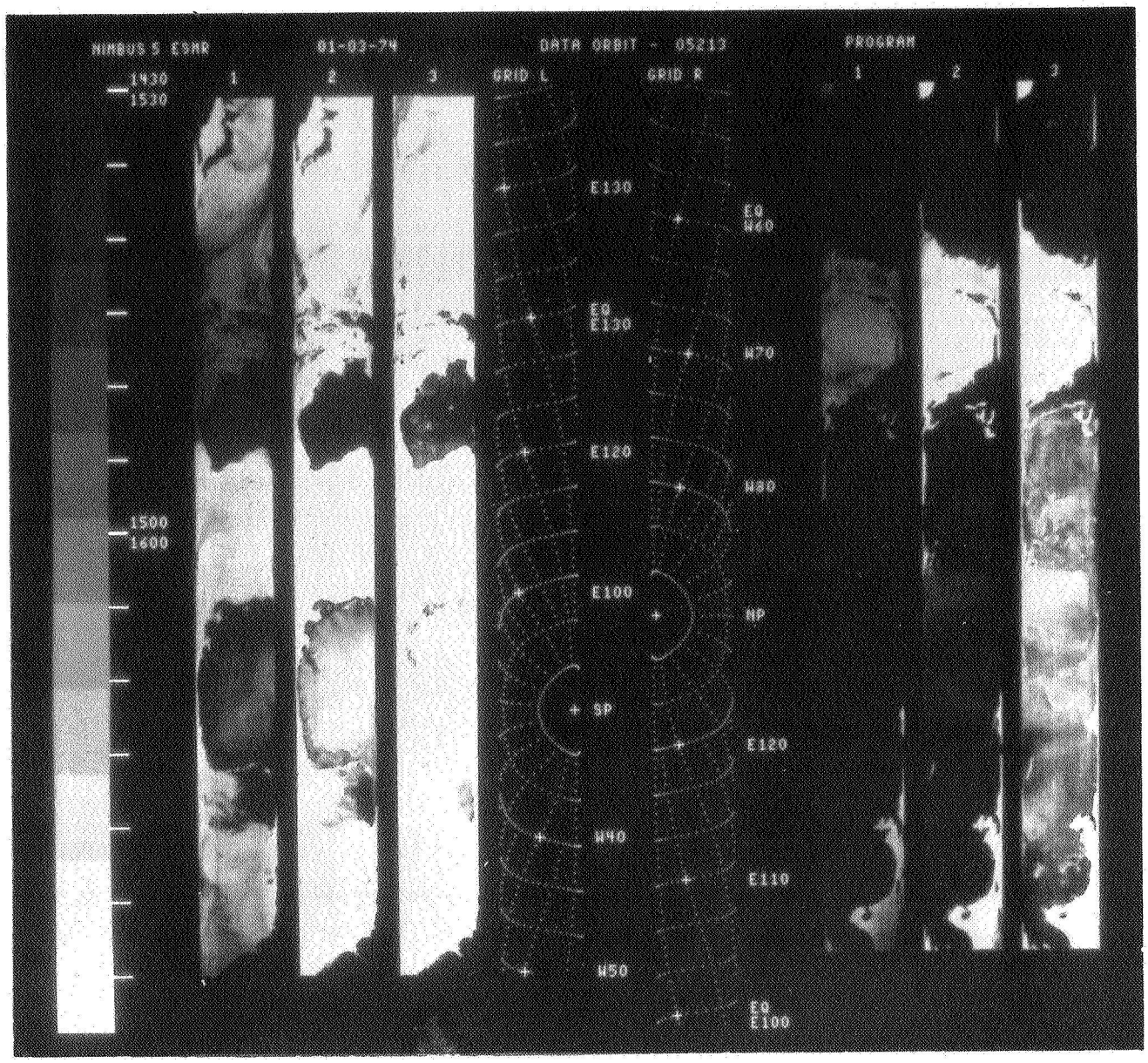

NIMBUS 5 ESMR
12-29-73
DATA ORBIT - 05143
PROGRAM
1800
1900
1930
1930
1
2
3
GRID L
GRID R
NP
W90
E90
W110
E80
E0
W110
E0
E70
W120
E60
W140
E50
NP
SP
E60

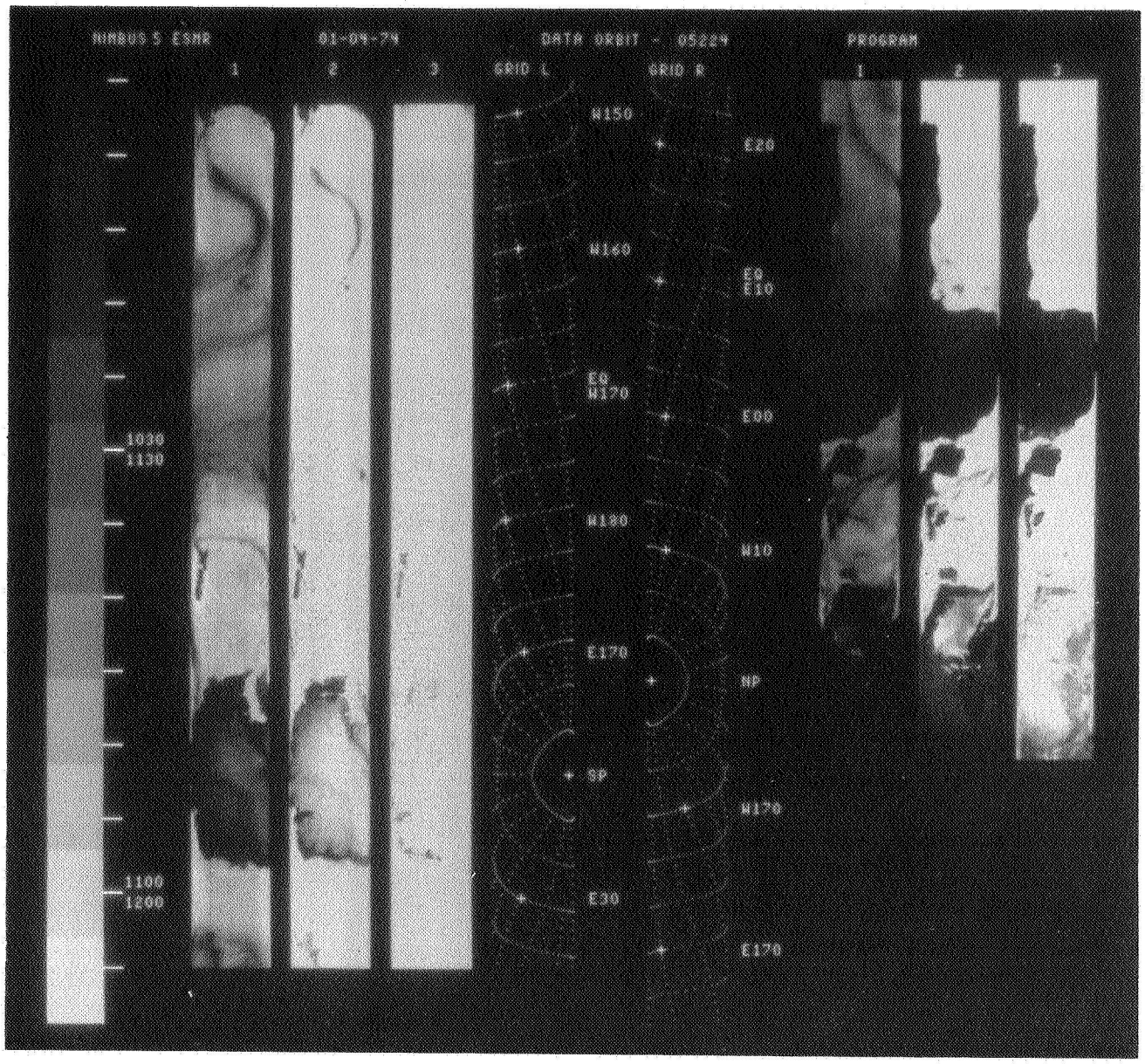

NIMBUS 5 ESMR
12-30-77
DATA ORBIT - 05160
PROGRAM
1
2
3
GRID L
GRID R
NP
E130
W70
E120
EQ
W60
EQ
E110
W80
E100
W100
E90
NP
SP
E100
W50
1400
1700
1630
1730

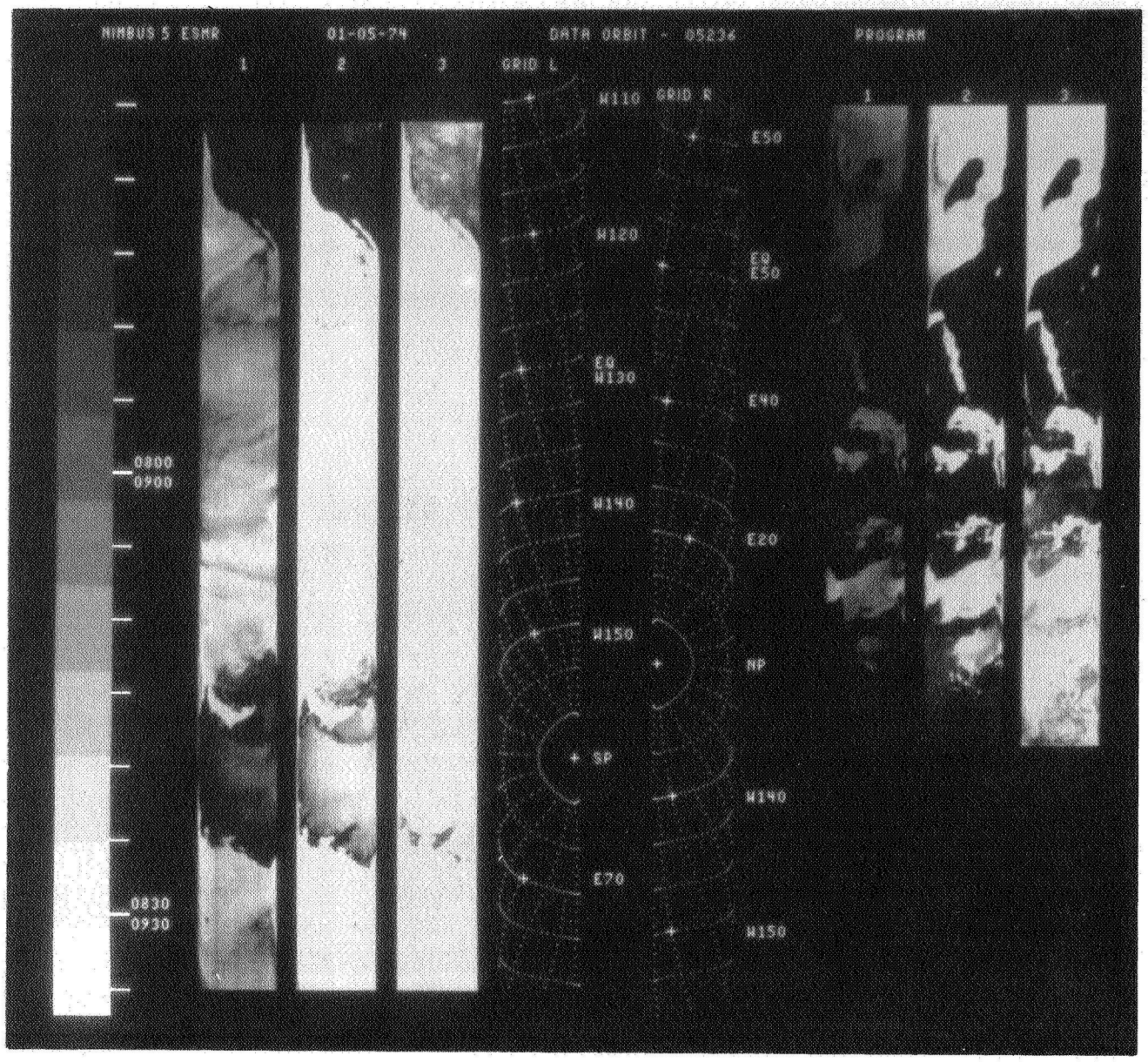

NIMBUS 5 ESMR
12-31-73
DATA ORBIT - 05169
PROGRAM
GRID L
GRID R
1
2
3
W110
E50
W130
EQ
E40
EQ
W130
E30
W140
E20
W160
NP
SP
W140
E60
W150
0800
0900
0820
0920

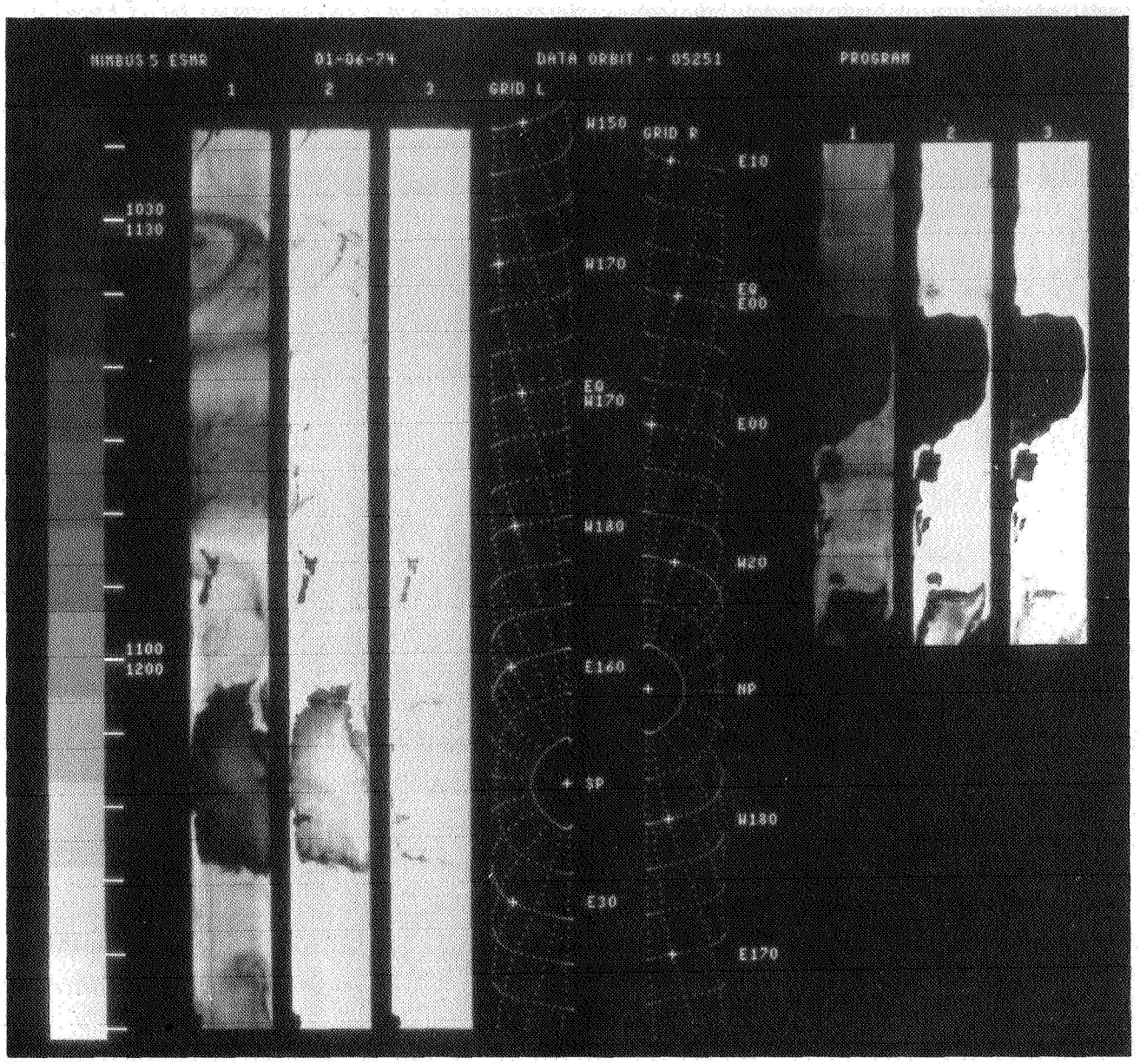

NIMBUS 5 ESMR
01-01-74
DATA ORBIT - 05185
PROGRAM
GRID L
GRID R
1
2
3
W180
W30
E160
EQ
W30
EQ
E160
W30
E150
W50
E130
NP
SP
E150
E80
E140
1230
1330
1300
1400

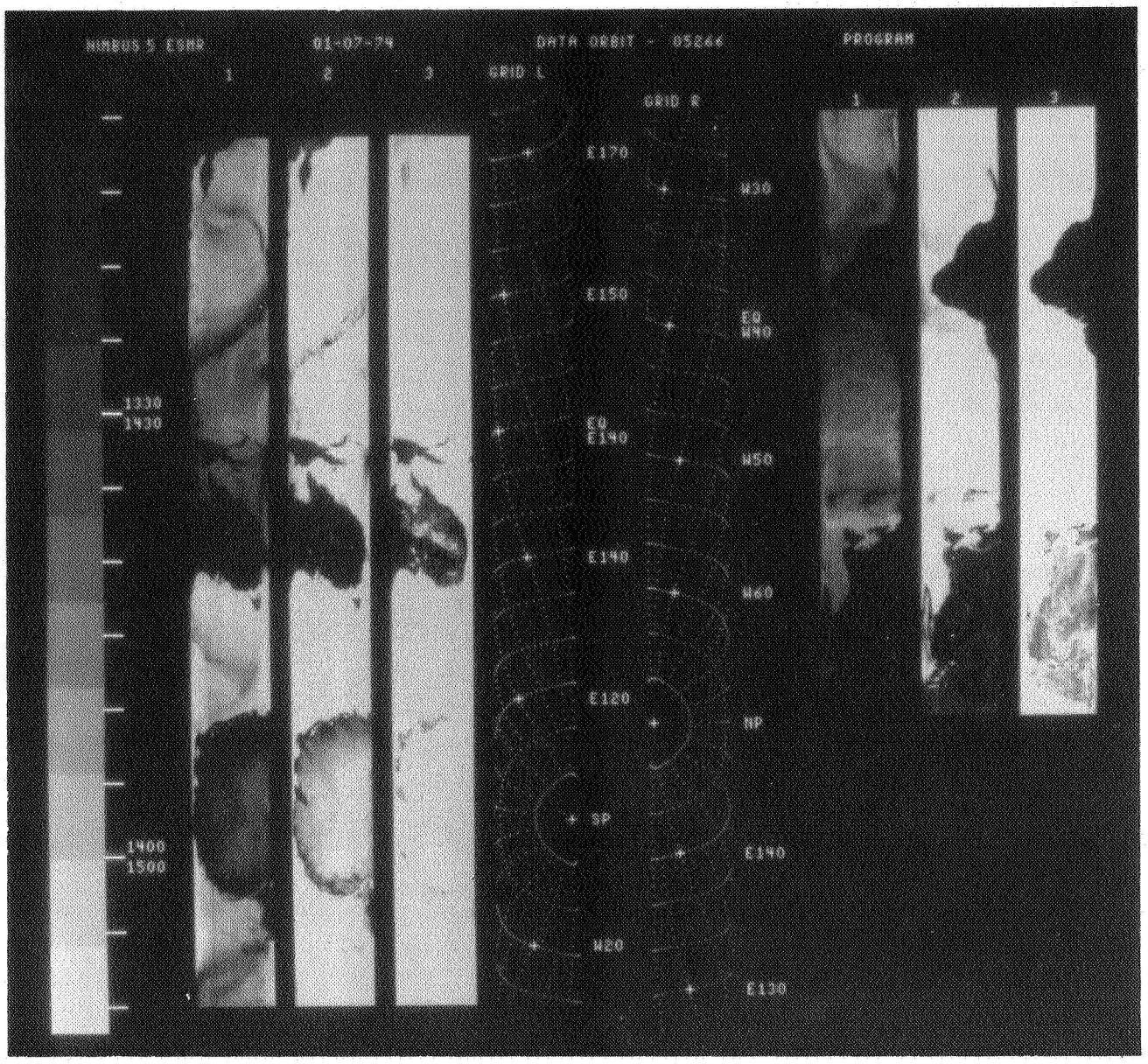

NIMBUS 5 ESMR
01-02-74
DATA ORBIT - 05193
PROGRAM
1
2
3
GRID L
GRID K
W40
E130
W50
EQ
E120
0300
0400
EQ
W60
E110
W70
E100
W80
NP
SP
0330
0430
W60
E140
W80

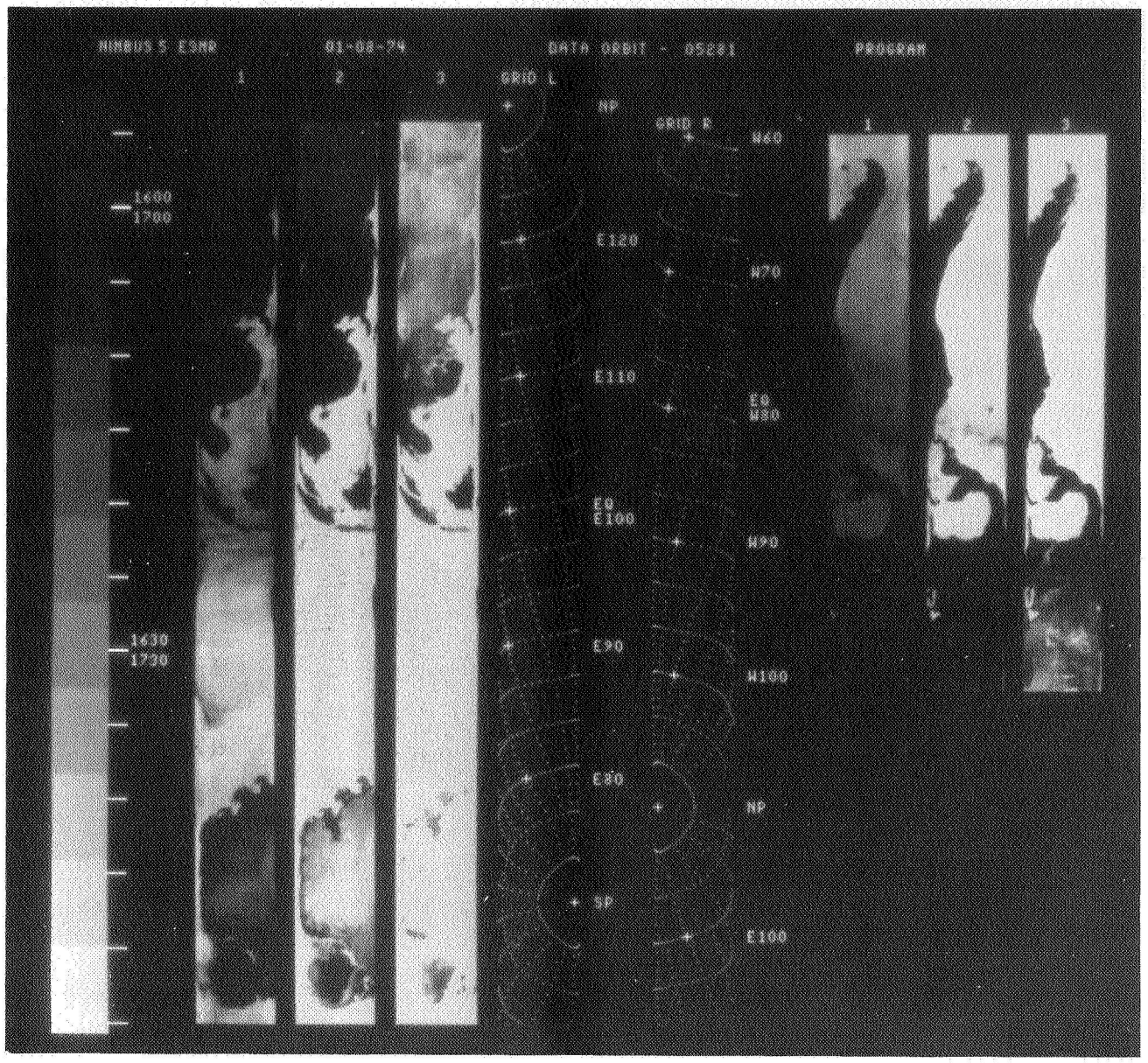

NIMBUS 5 ESMR
01-03-74
DATA ORBIT - 05213
PROGRAM
1
2
3
GRID L
GRID R
1430
1530
1500
1600
E130
EQ
W40
EQ
E130
W70
E120
W30
E100
NP
SP
E120
W40
E110
W50
EQ
E100

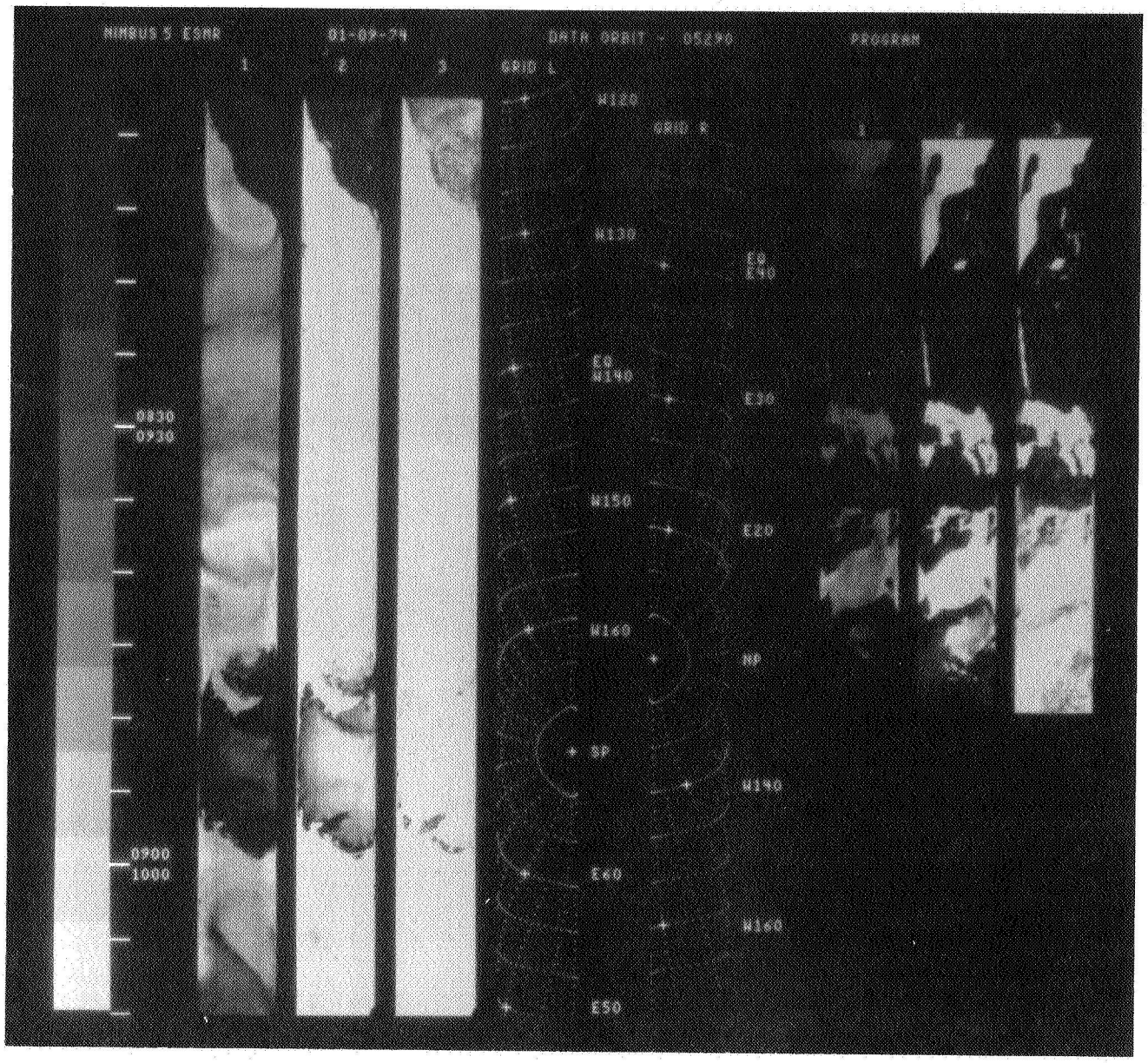

NIMBUS 5 ESMR
01-09-74
DATA ORBIT - 05224
PROGRAM
1
2
3
GRID L
GRID R
W150
E20
W160
EQ
E10
EQ
W170
E00
W180
W10
E170
NP
SP
W170
E30
E170
1000
1100
1100
1200

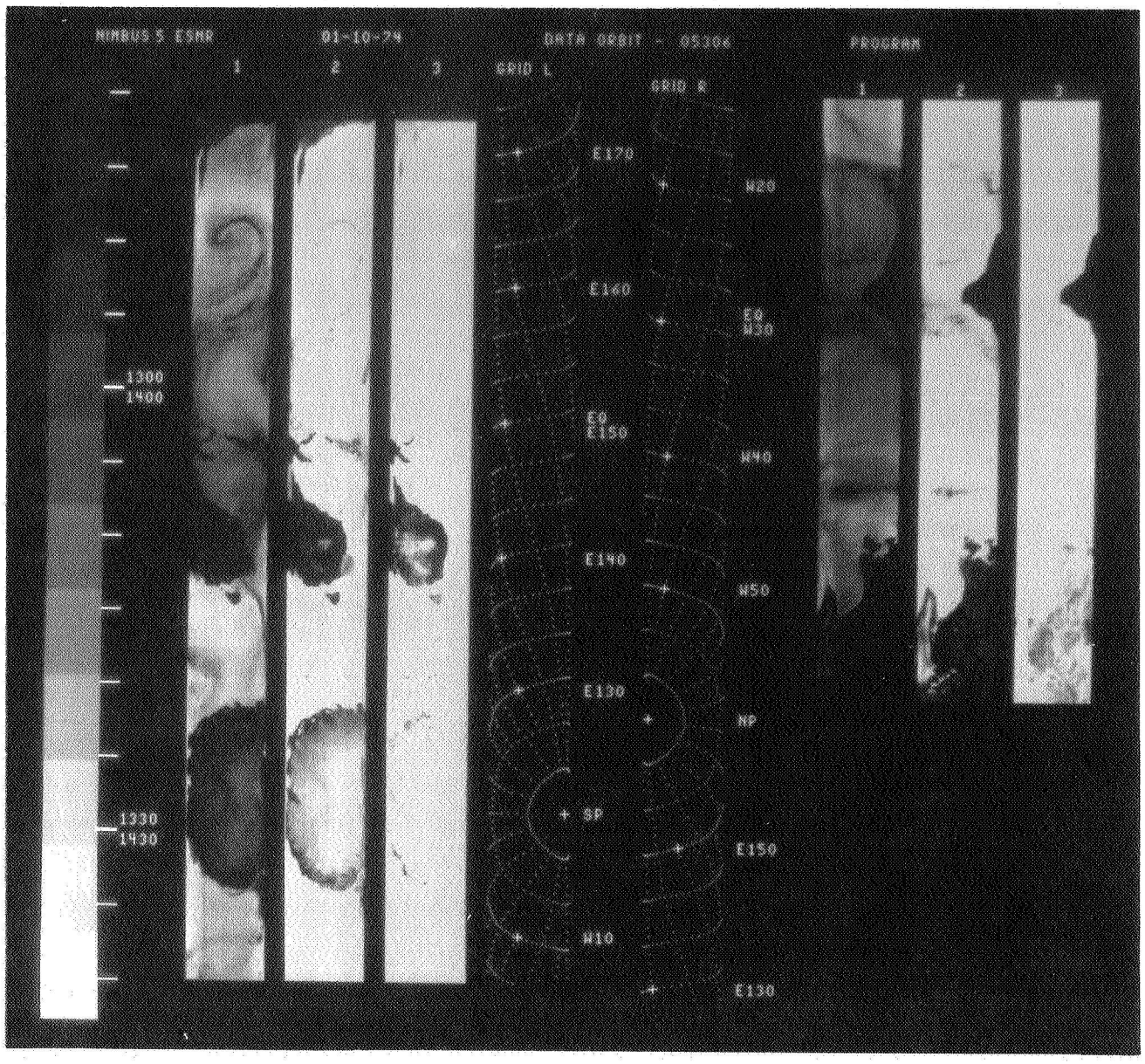

NIMBUS 5 ESMR
01-05-74
DATA ORBIT - 05234
PROGRAM
1
2
3
GRID L
GRID K
W110
E50
W120
E0
E50
E0
W130
E40
W140
E20
W150
NP
SP
W140
E70
W150
0800
0900
0830
0930

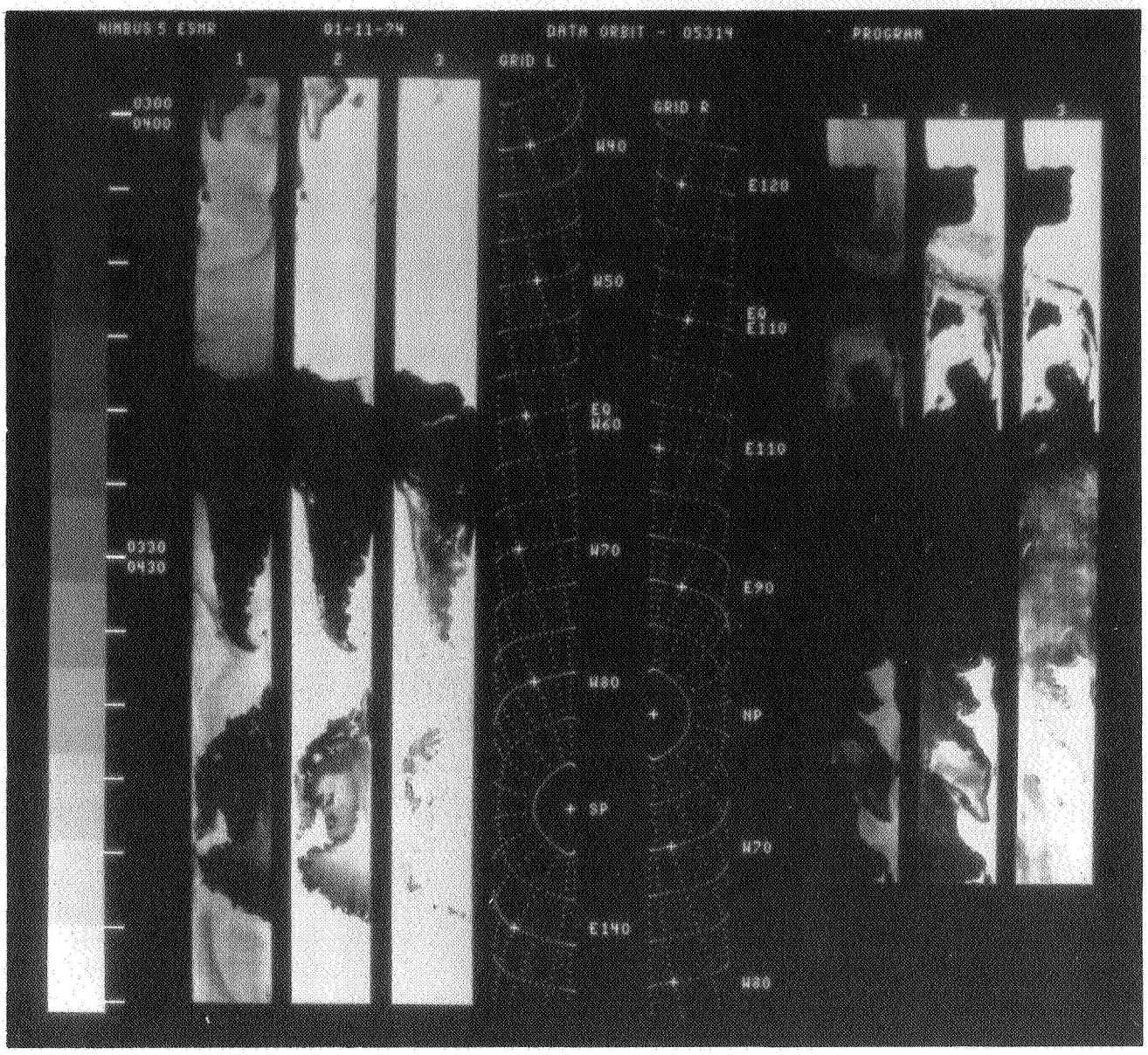

NIMBUS 5 ESMR
01-04-74
DATA ORBIT - 05251
PROGRAM
1
2
3
GRID L
GRID R
1030
1130
1100
1200
W150
E10
W170
EQ
E00
EQ
W170
E00
W180
W20
E160
NP
SP
W180
E30
E170

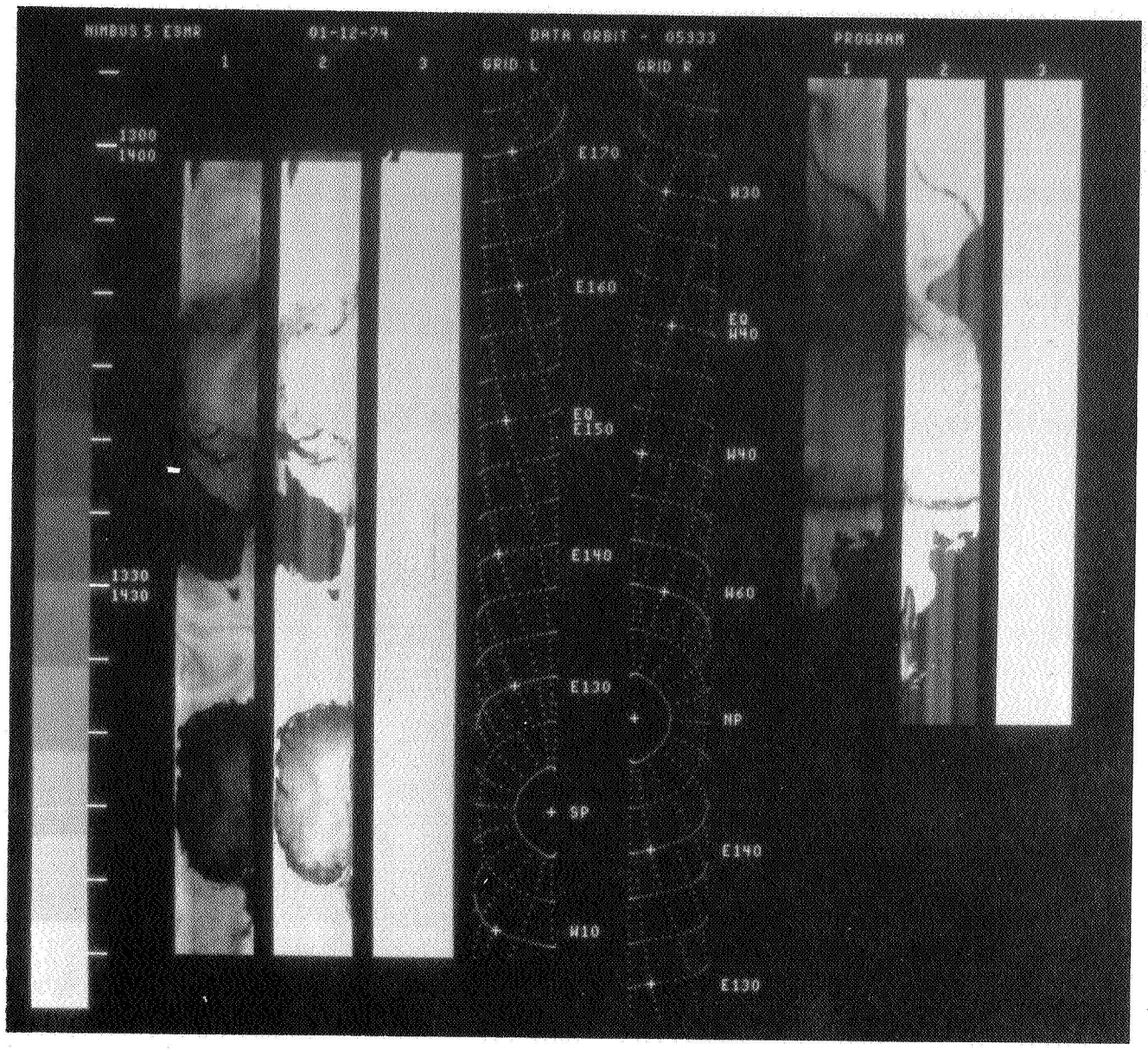

NIMBUS 5 ESMR
01-07-74
DATA ORBIT - 05244
PROGRAM
1
2
3
GRID L
GRID R
E170
W30
E150
EQ
W40
EQ
E140
W50
E140
W60
E120
NP
SP
E140
W20
E130
1330
1430
1400
1500

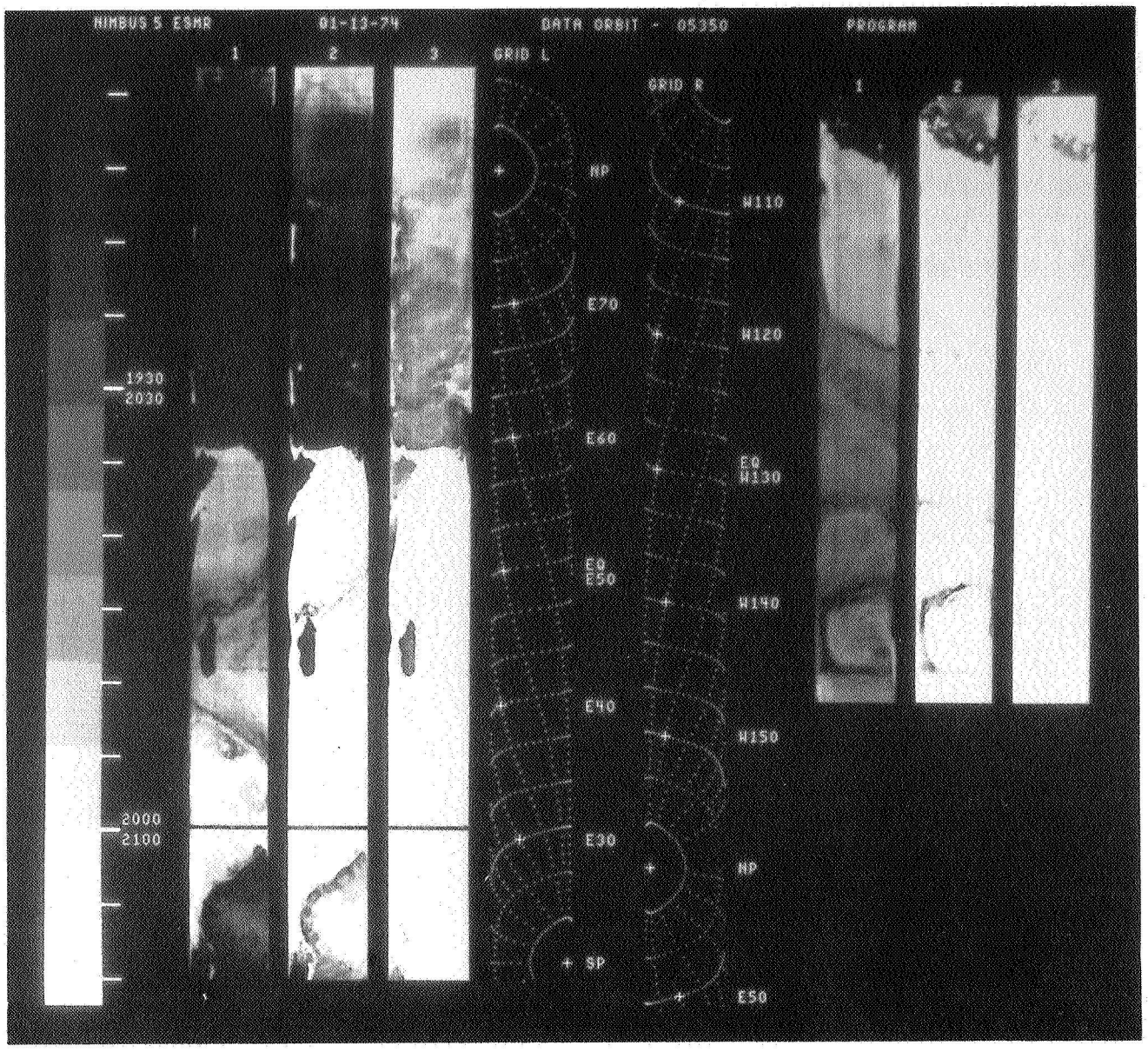

NIMBUS 5 ESMR
01-08-74
DATA ORBIT - 05221
PROGRAM
1
2
3
GRID L
GRID R
NP
W40
E120
W70
E110
EQ
W50
EQ
E100
W90
E90
W100
E80
NP
SP
E100
1400
1700
1430
1730

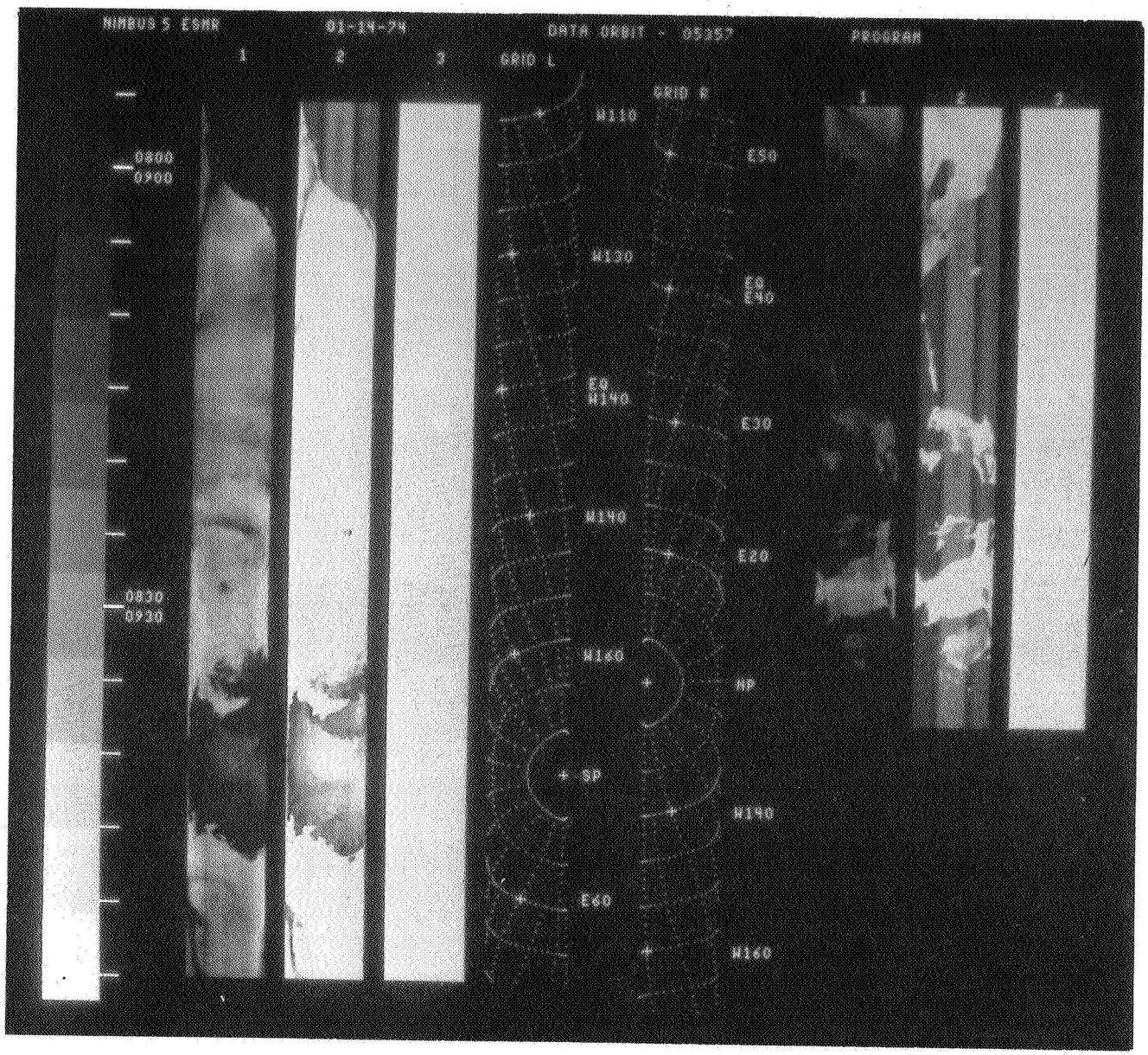

NIMBUS 5 ESMR
01-09-74
DATA ORBIT - 05290
PROGRAM
1
2
3
GRID L
GRID R
W120
W130
EQ
E30
EQ
W140
E30
W150
E20
W160
NP
SP
W180
E40
W160
E50
0830
0930
0900
1000

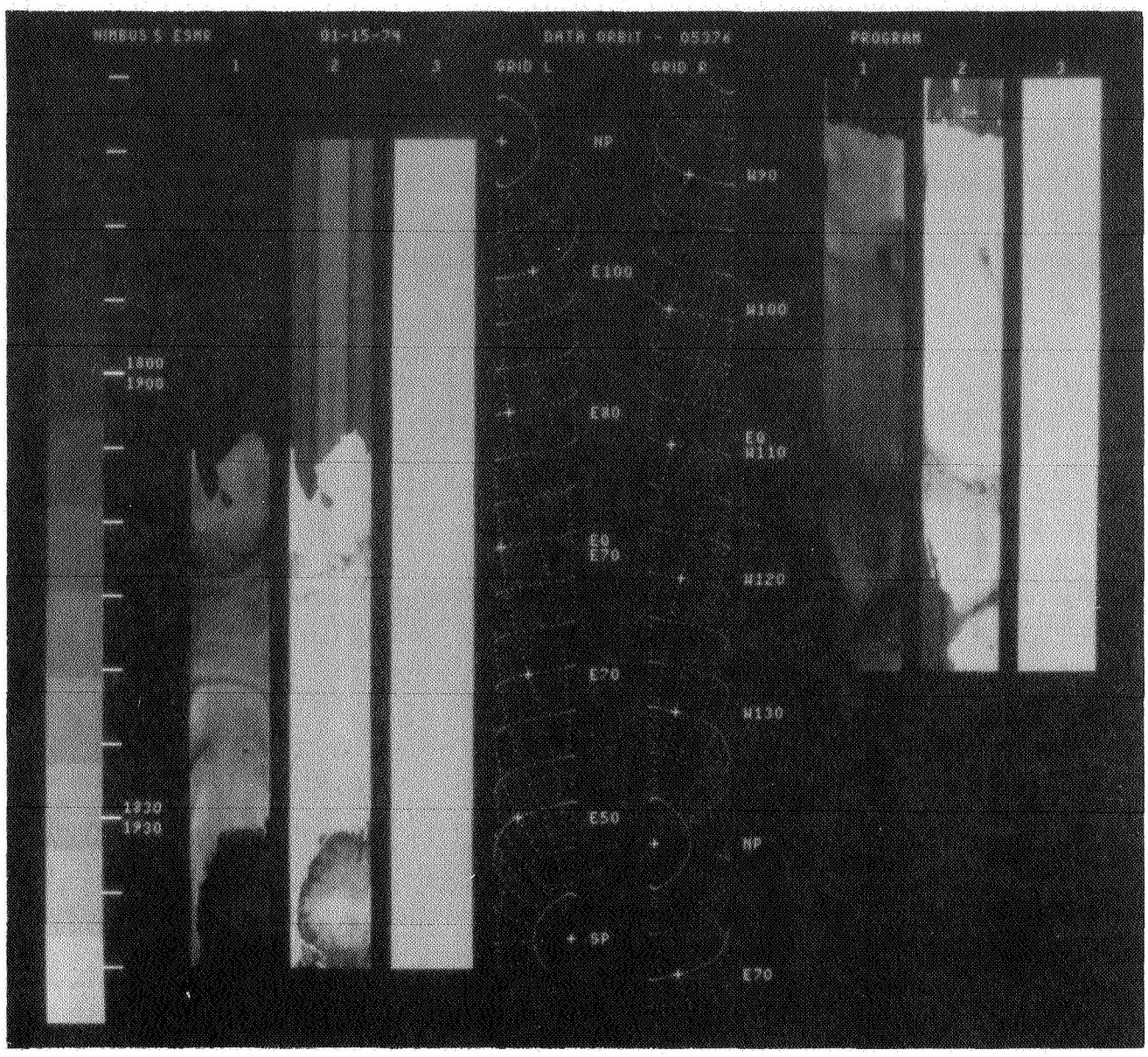

NIMBUS 5 ESMR
01-10-74
DATA ORBIT - 05206
PROGRAM
1
2
3
GRID L
GRID R
E170
W20
E160
EQ
W30
EQ
E150
W40
E140
W50
E130
NP
SP
E150
W10
E130
1300
1400
1330
1430

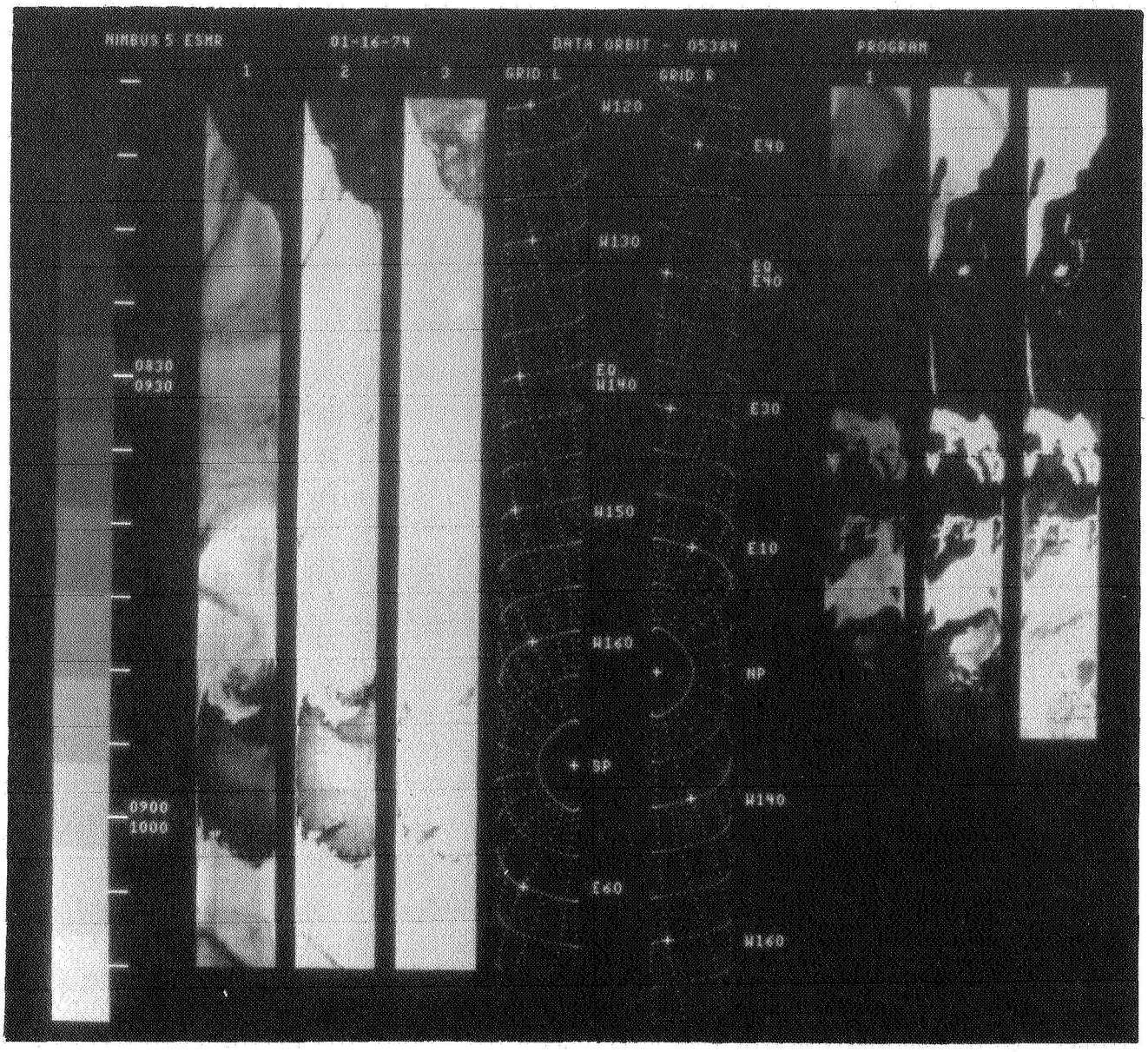

NIMBUS 5 ESMR
01-11-74
ORBIT - 05314
PROGRAM
1
2
3
GRID L
GRID R
0300
0400
0230
0430
W40
E120
W50
EQ
E110
EQ
W20
E110
W70
E90
W80
NP
SP
W70
E140
W20

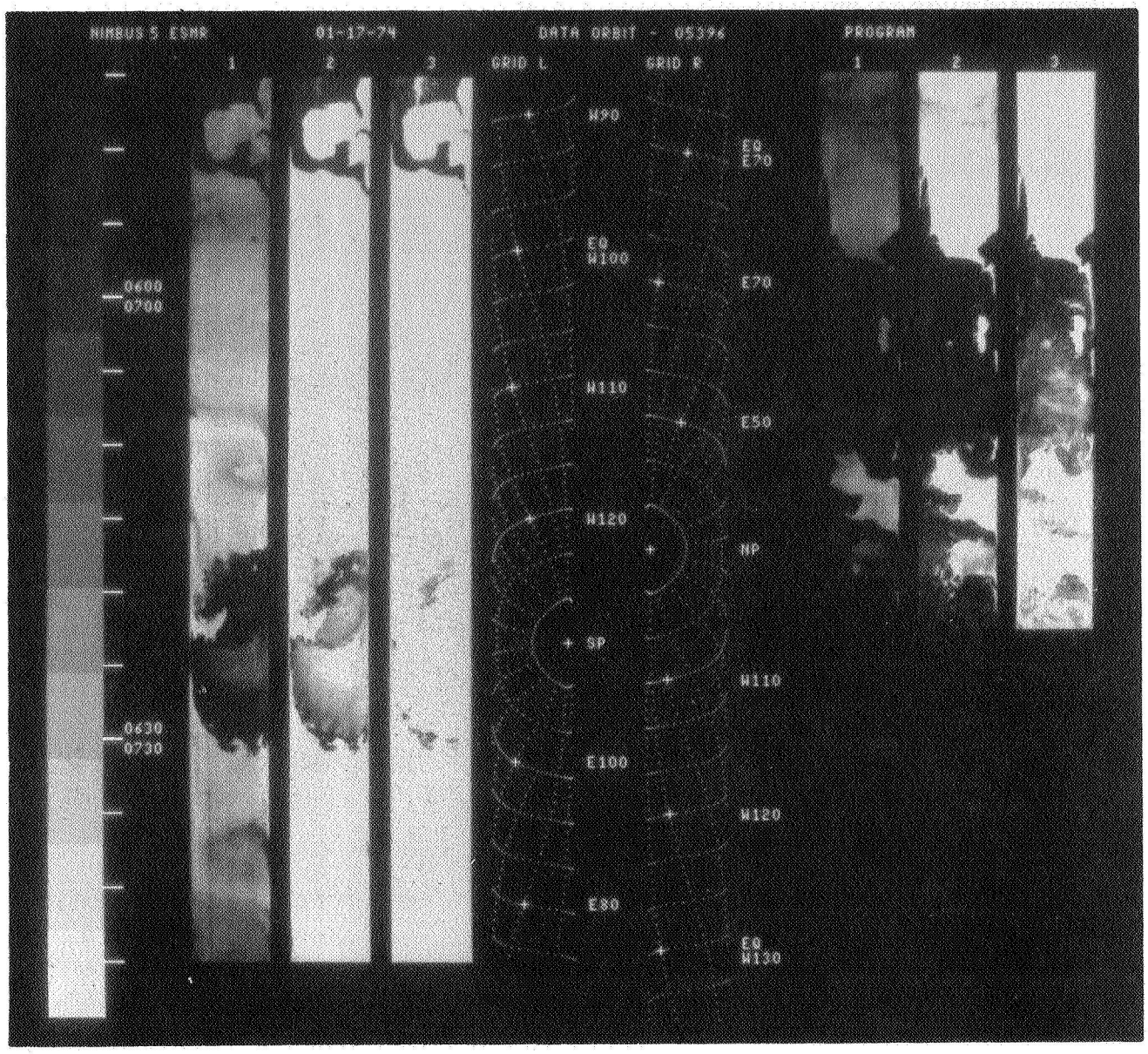

NIMBUS 5 ESMR
01-12-74
DATA ORBIT - 05333
PROGRAM
1
2
3
GRID L
GRID R
1300
1400
1330
1430
E170
W20
E160
EQ
W40
EQ
E150
W40
E140
W60
E130
NP
SP
E140
W10
E130

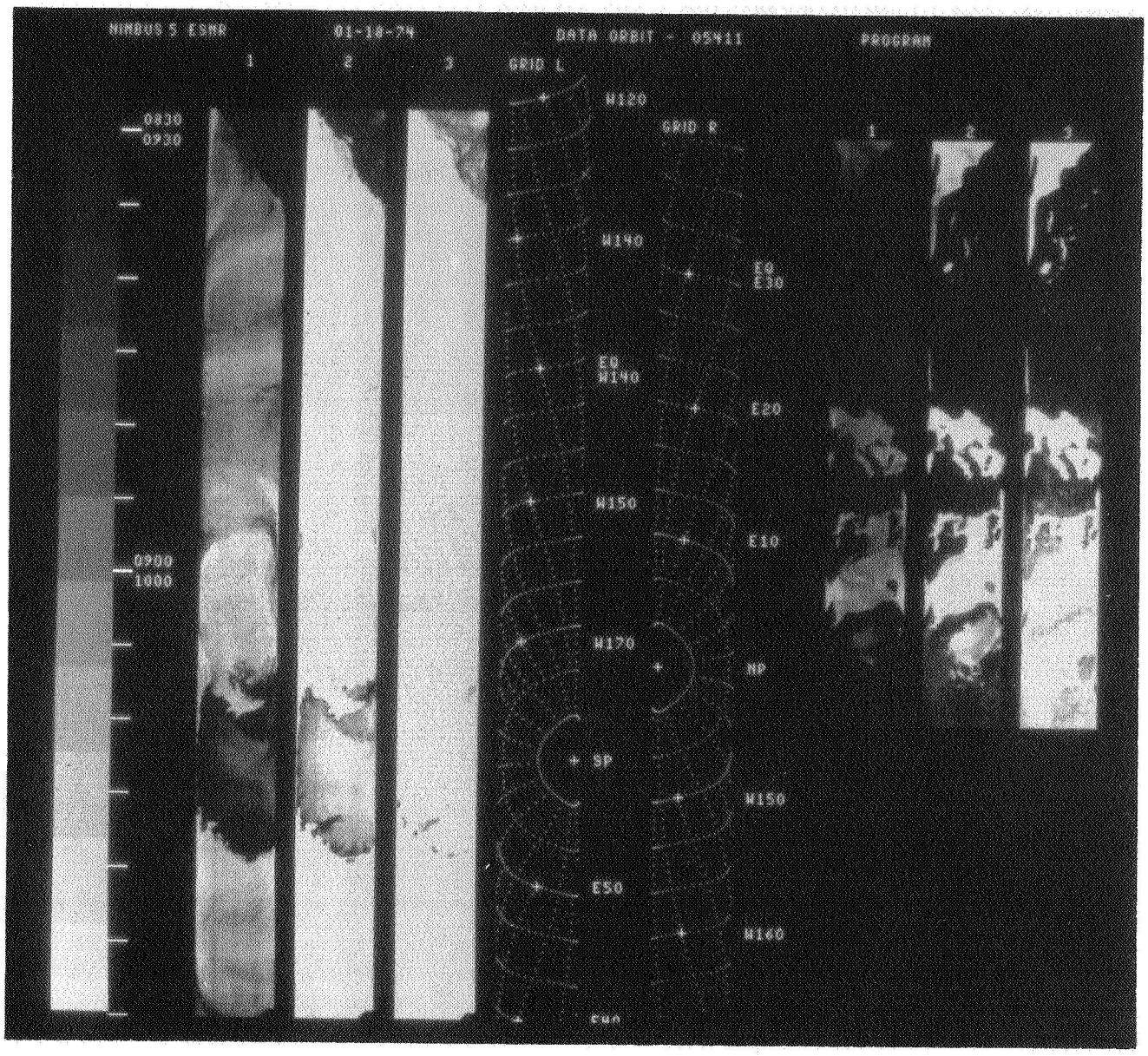

NIMBUS 5 ESMR
01-13-74
DATA ORBIT - 05350
PROGRAM
1
2
3
GRID L
GRID R
NP
E70
E60
E50
E40
E30
SP
W110
W120
EQ
W130
W140
W150
NP
E50
1930
2030
2000
2100

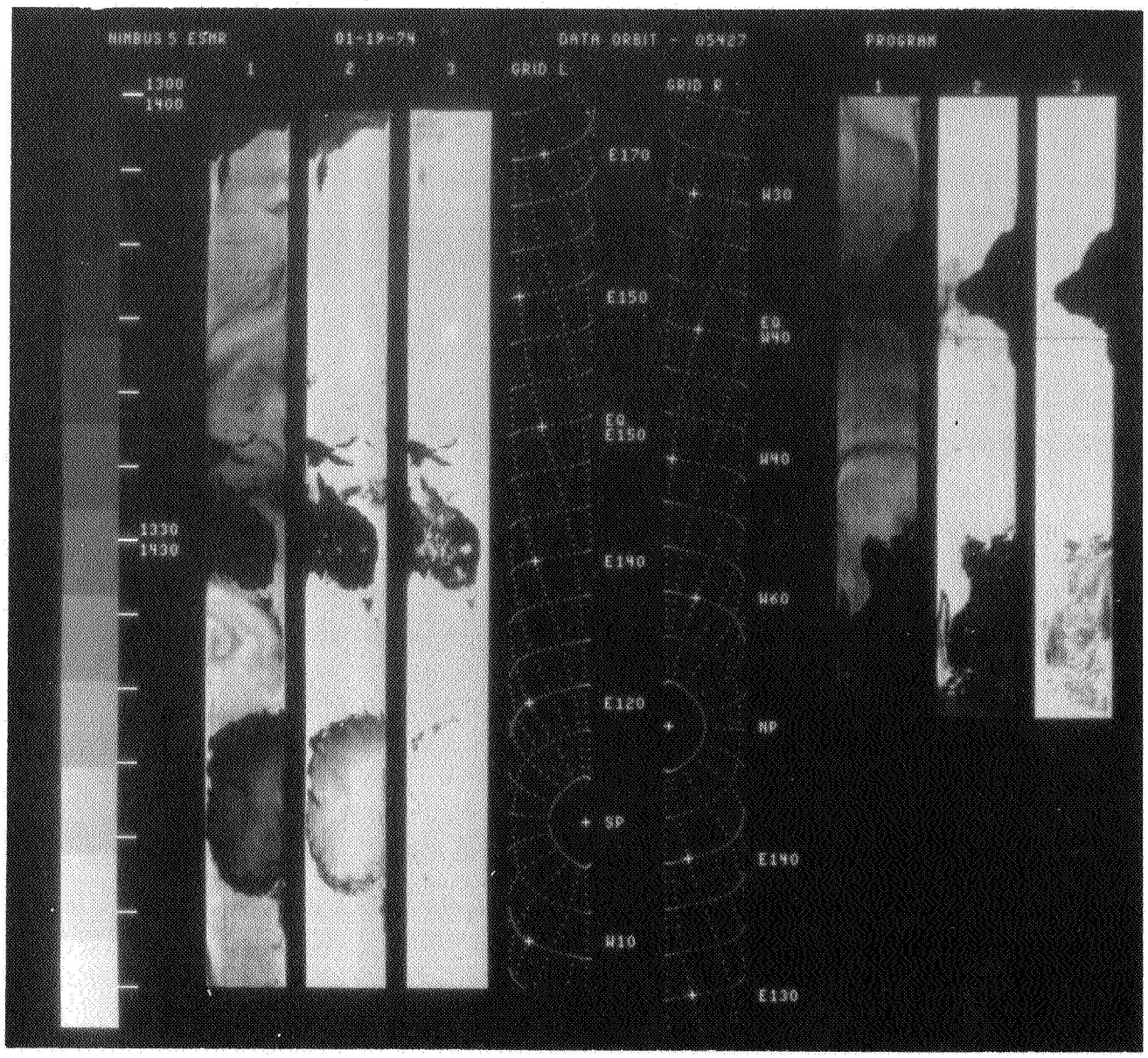

NIMBUS 5 ESMR
01-14-74
DATA ORBIT - 05257
PROGRAM
1
2
3
GRID L
GRID R
0800
0900
0830
0930
N110
E50
N130
E0
E40
E0
N140
E30
N140
E20
N160
NP
SP
N140
E60
N160

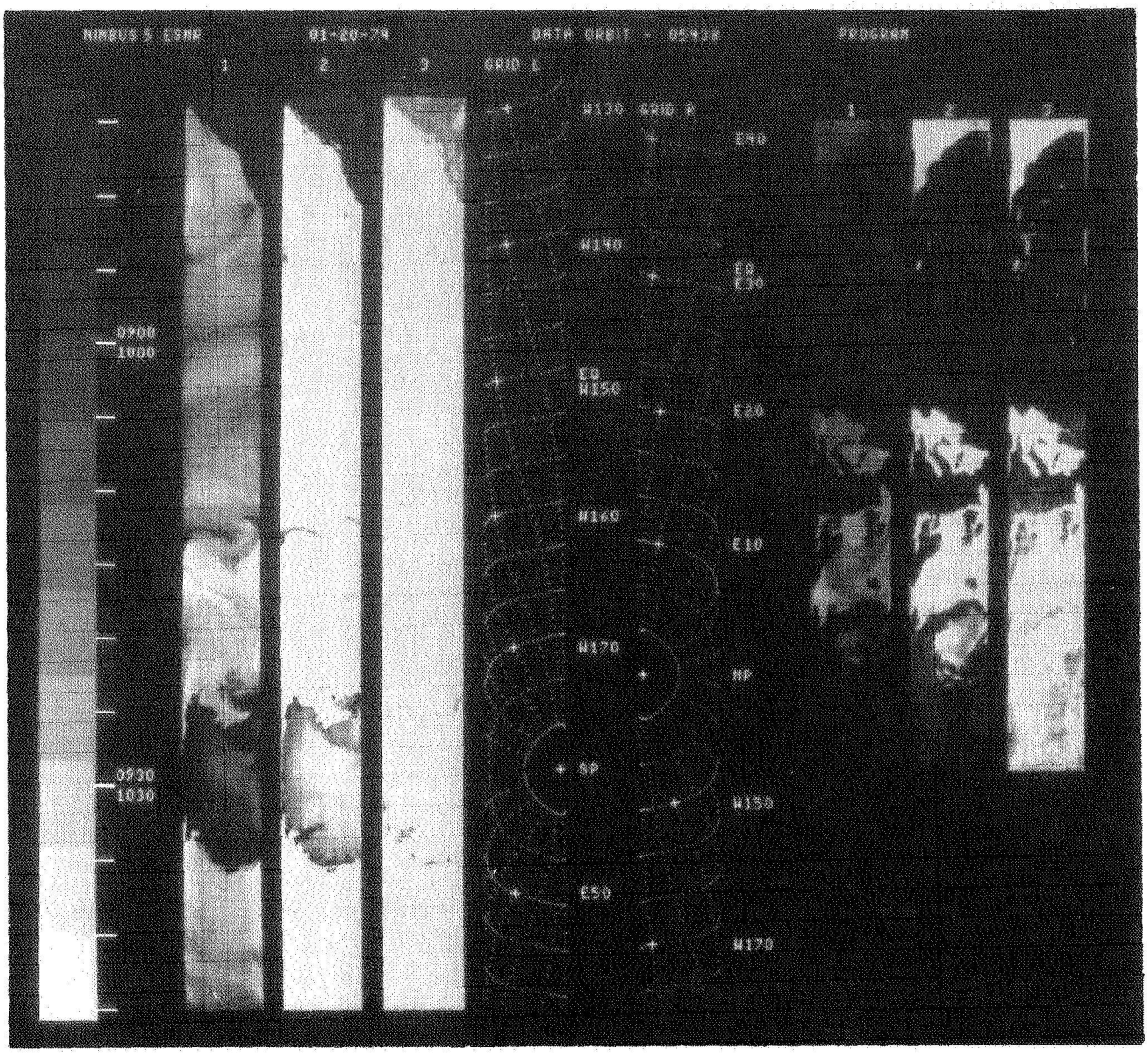

1800
1900
1920
1930
NP
W90
E100
W100
E80
E0
W110
E70
W120
E70
W130
E50
NP
SP
E70

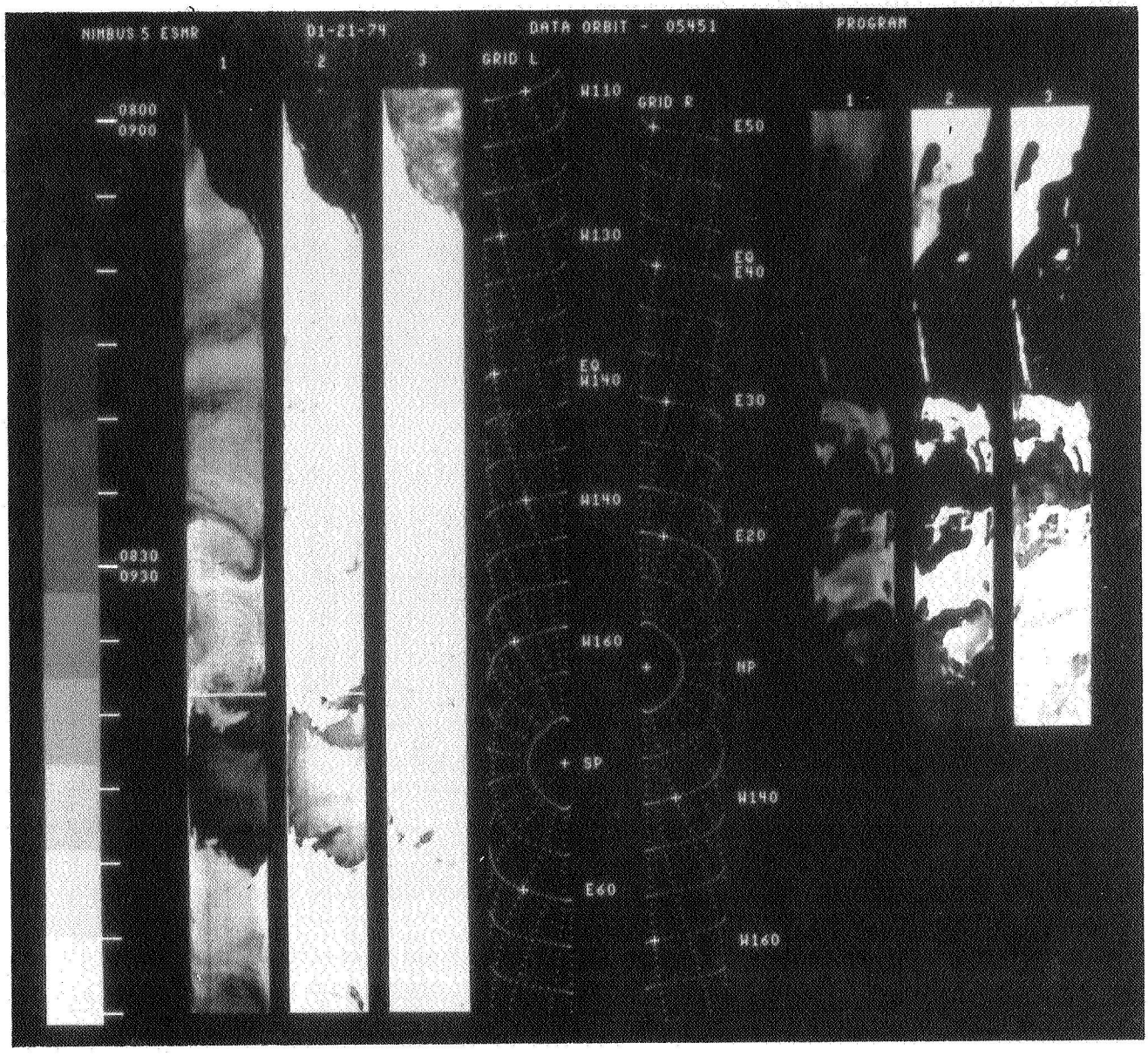

NIMBUS 5 ESMR
01-14-74
DATA ORBIT - 05384
PROGRAM
1
2
3
GRID L
GRID R
W120
E40
W130
EQ
E40
EQ
W140
E30
W150
E10
W160
NP
SP
W140
E60
W160
0830
0930
0900
1000

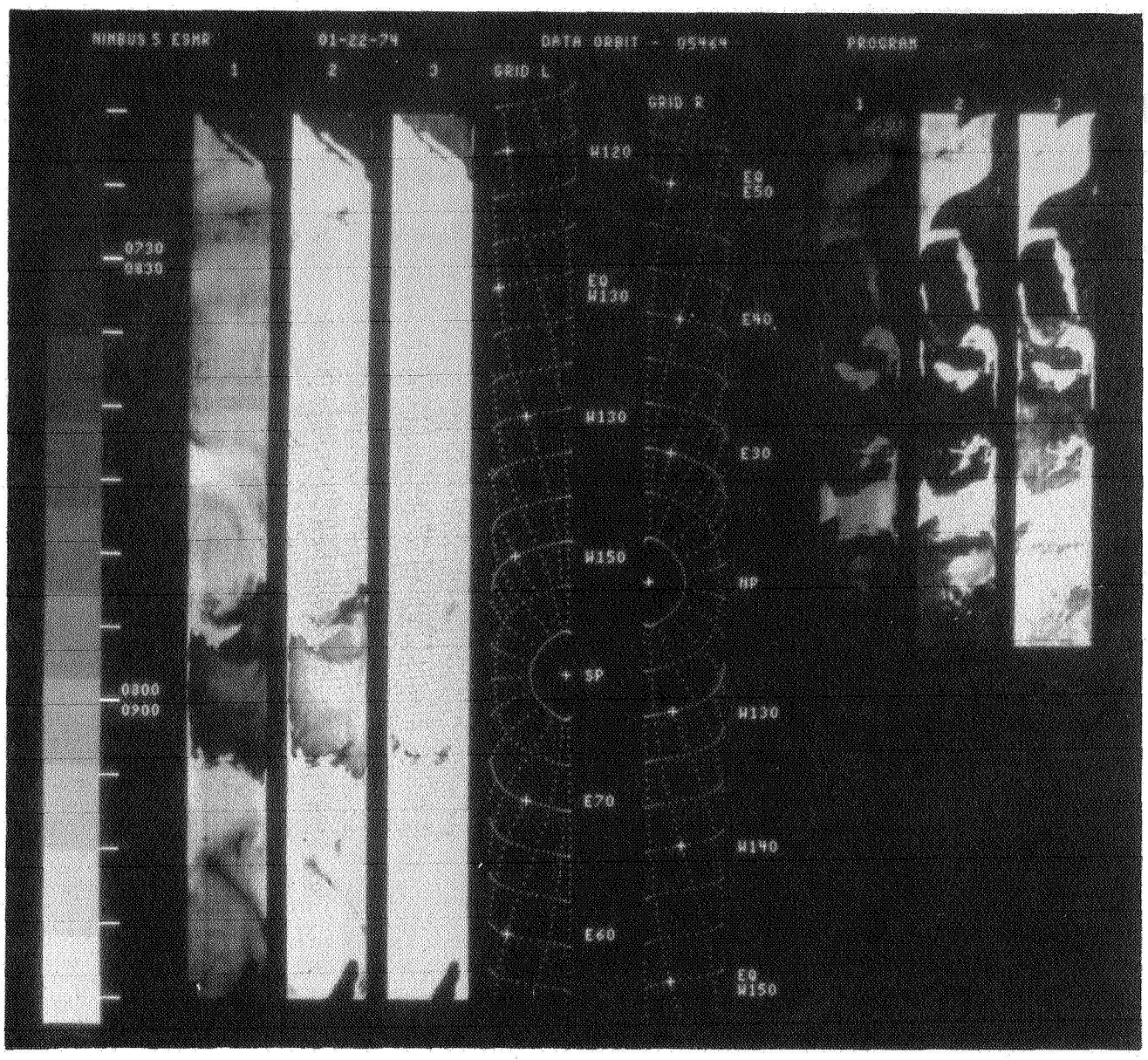

NIMBUS 5 ESMR
01-17-74
ORBIT - 05396
GRID L
GRID R
PROGRAM
1
2
3
W90
EQ
E70
EQ
W100
E70
W110
E50
W120
NP
SP
W110
E100
W120
E80
EQ
W130
0600
0700
0630
0730

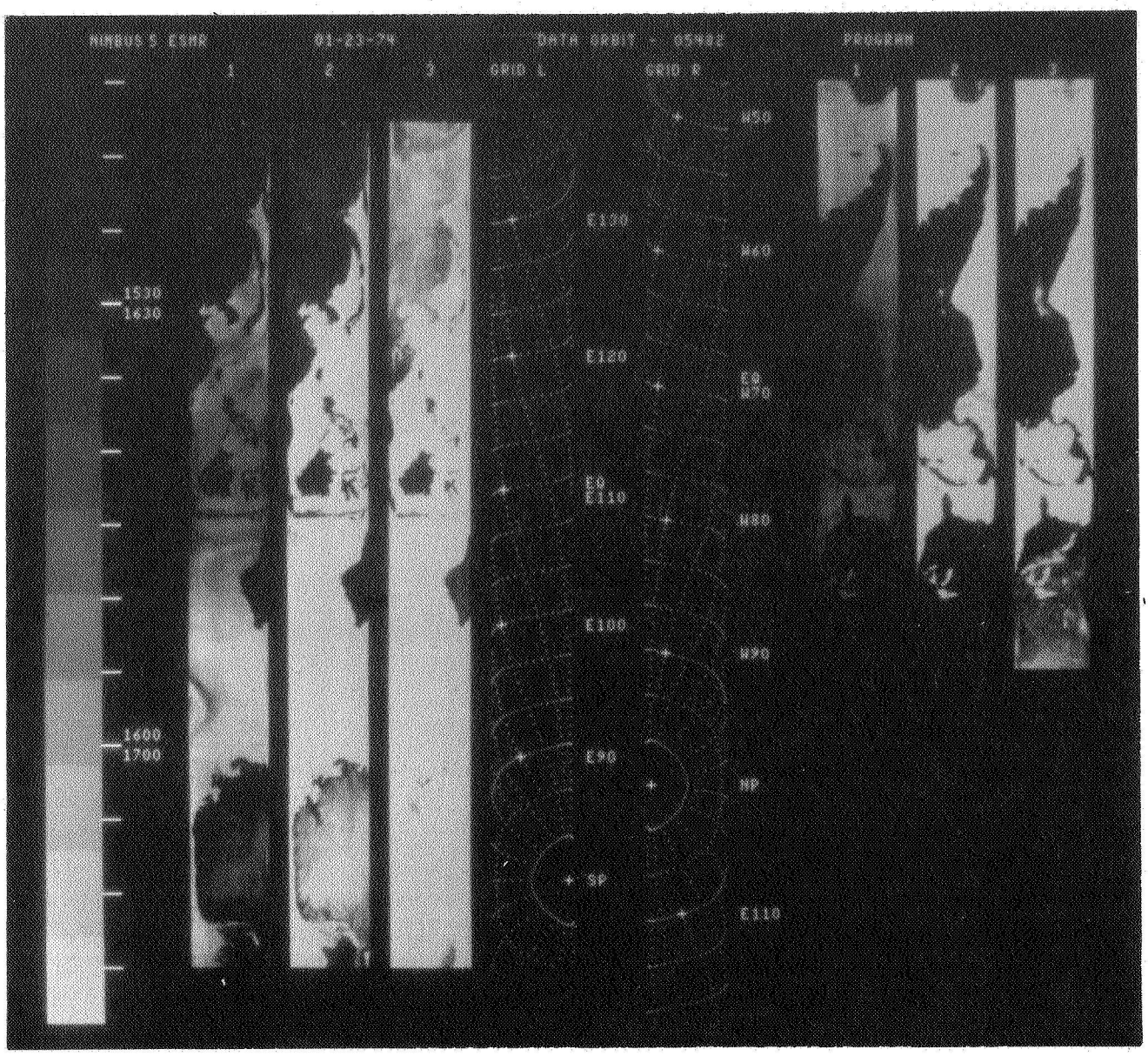

NIMBUS 5 ESMR
01-18-74
DATA ORBIT - 05411
PROGRAM
1
2
3
GRID L
GRID R
0830
0930
0900
1000
W120
W140
EQ
E30
EQ
W140
E20
W150
E10
W170
NP
SP
W150
E50
W160
EQ

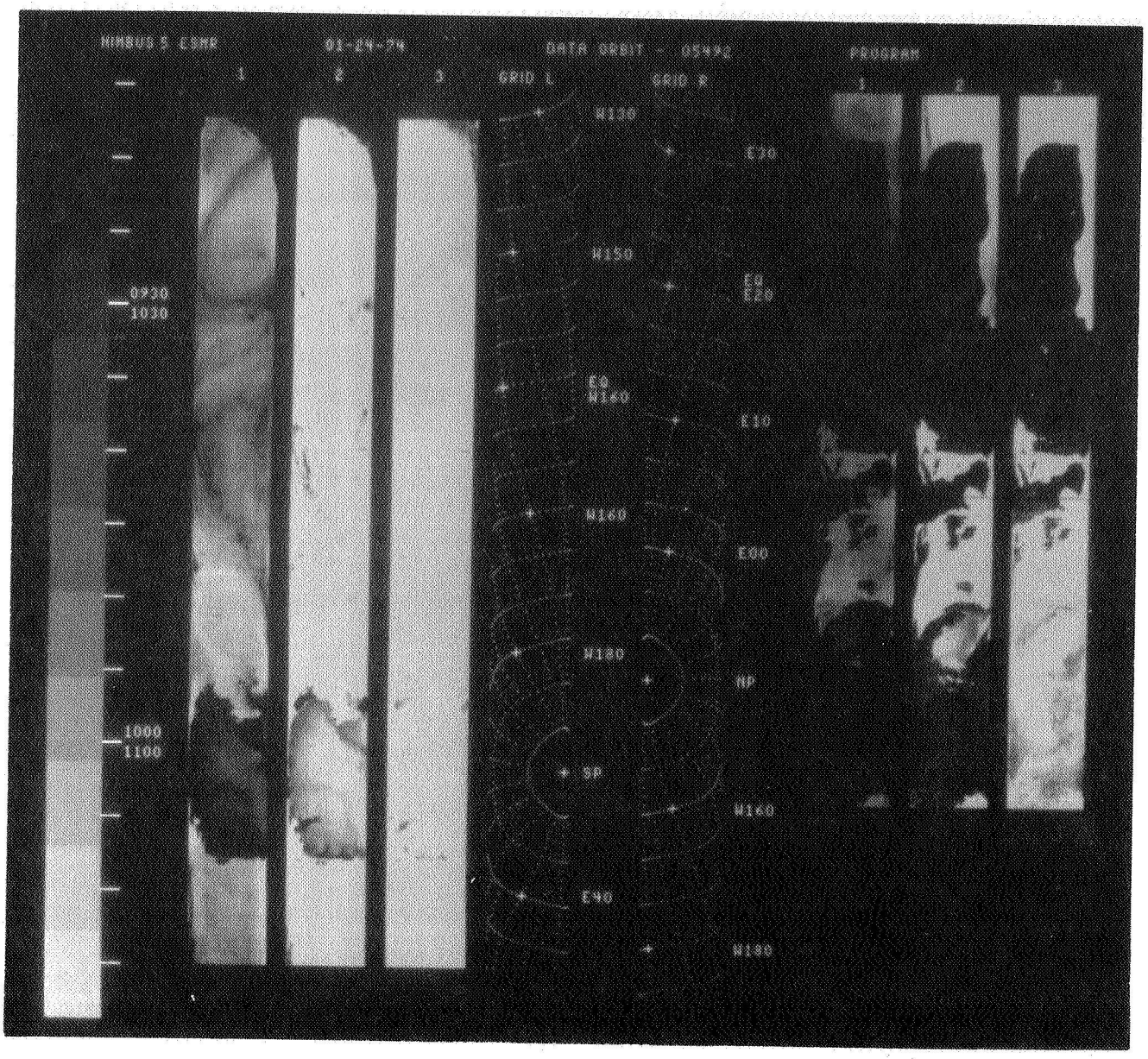

NIMBUS 5 ESMR
01-19-74
DATA ORBIT - 05427
PROGRAM
1 2 3
GRID L
GRID P
1300
1400
1330
1430
E170
W30
E150
EQ
W40
EQ
E150
W40
E140
W60
E120
NP
SP
E140
W10
E130

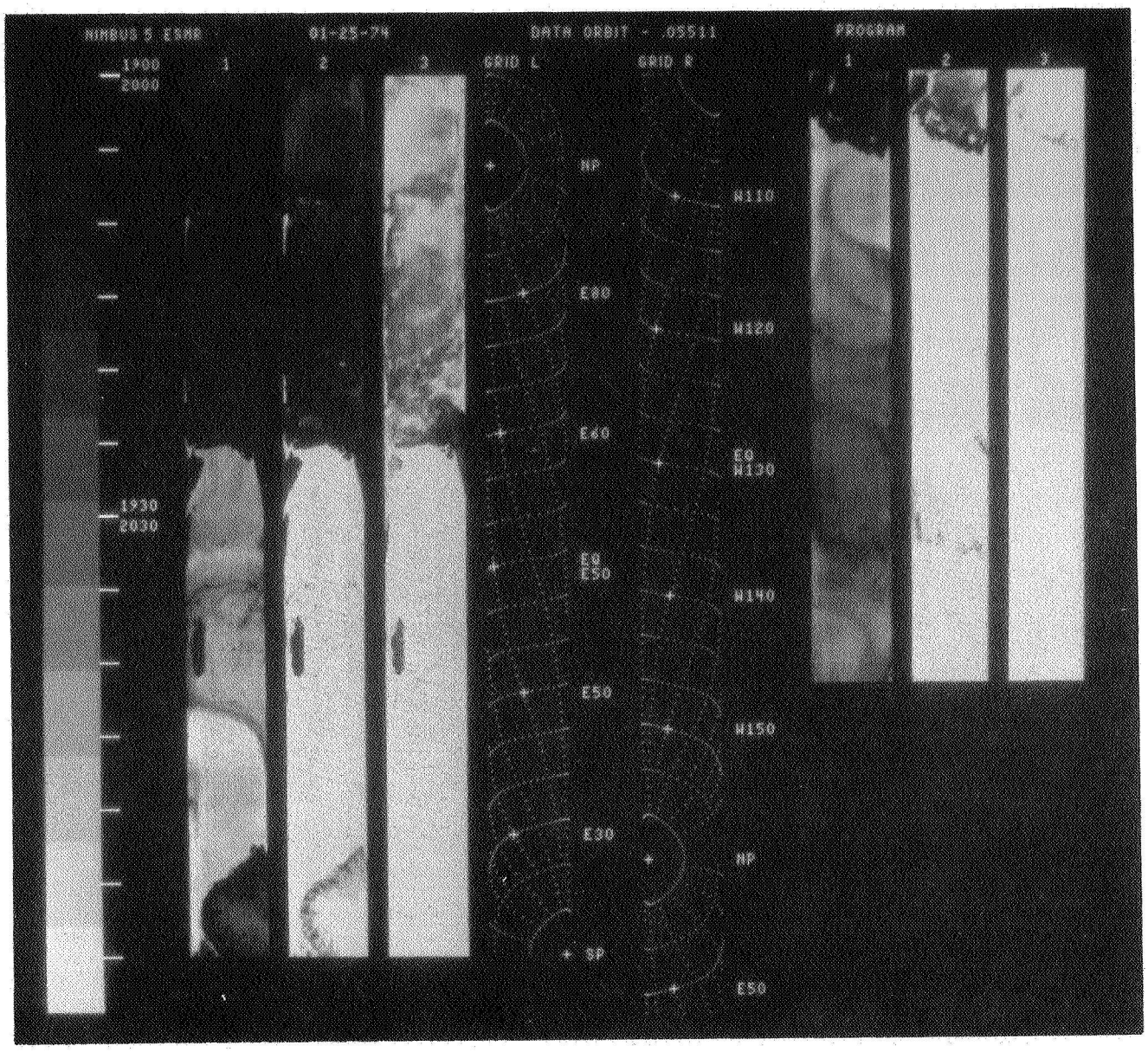

NIMBUS 5 ESMR
01-20-74
DATA ORBIT - 05933
PROGRAM
1
2
3
GRID L
W130 GRID R
E40
W140
EQ
E30
EQ
W150
E20
W160
E10
W170
NP
SP
W150
E50
W170
0900
1000
0930
1030

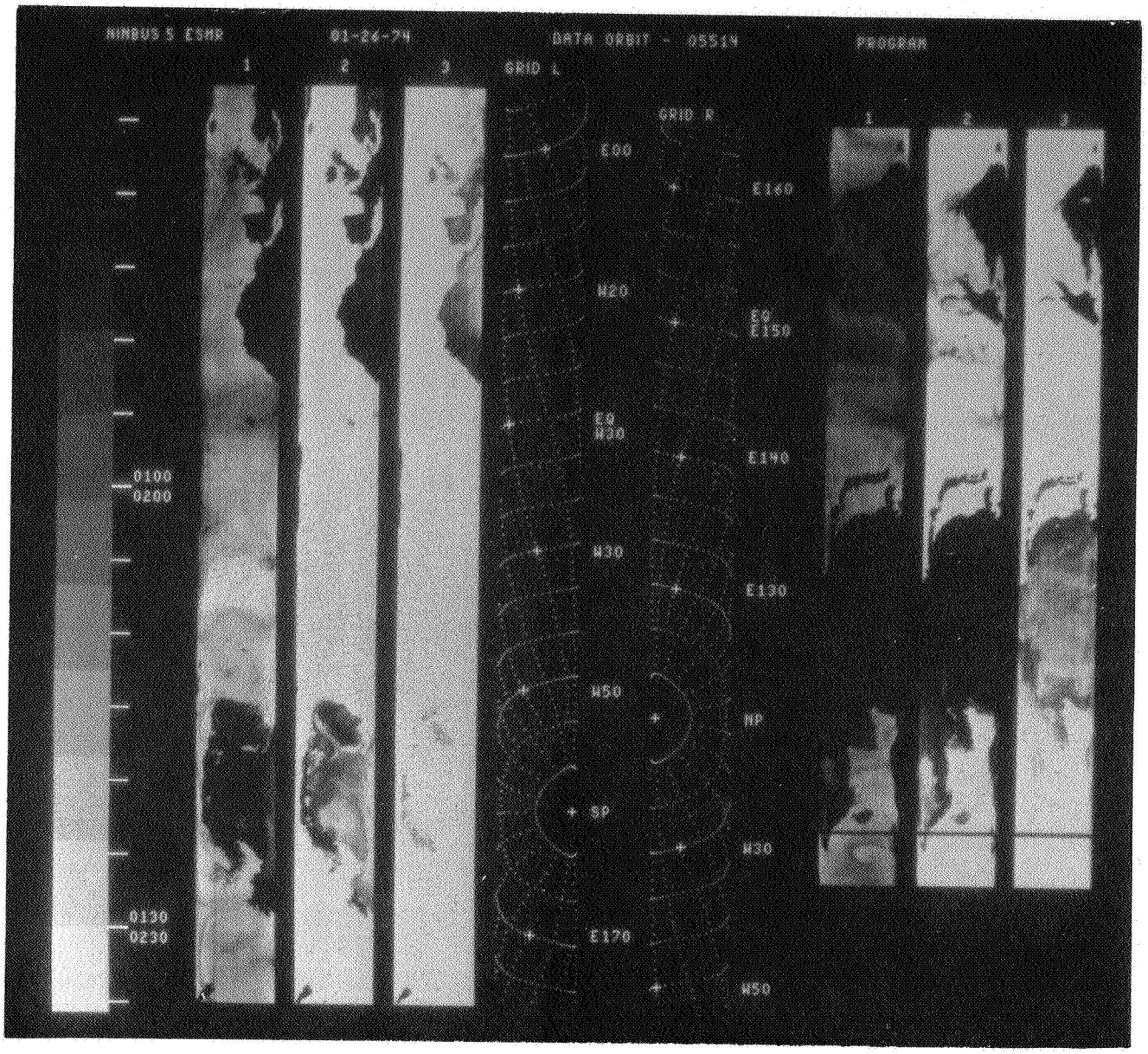

NIMBUS 5 ESMR
01-21-74
DATA ORBIT - 05451
PROGRAM
1
2
3
GRID L
GRID R
0800
0900
0830
0930
W110
E50
W130
EQ
E40
EQ
W140
E30
W140
E20
W160
NP
SP
W140
E60
W160

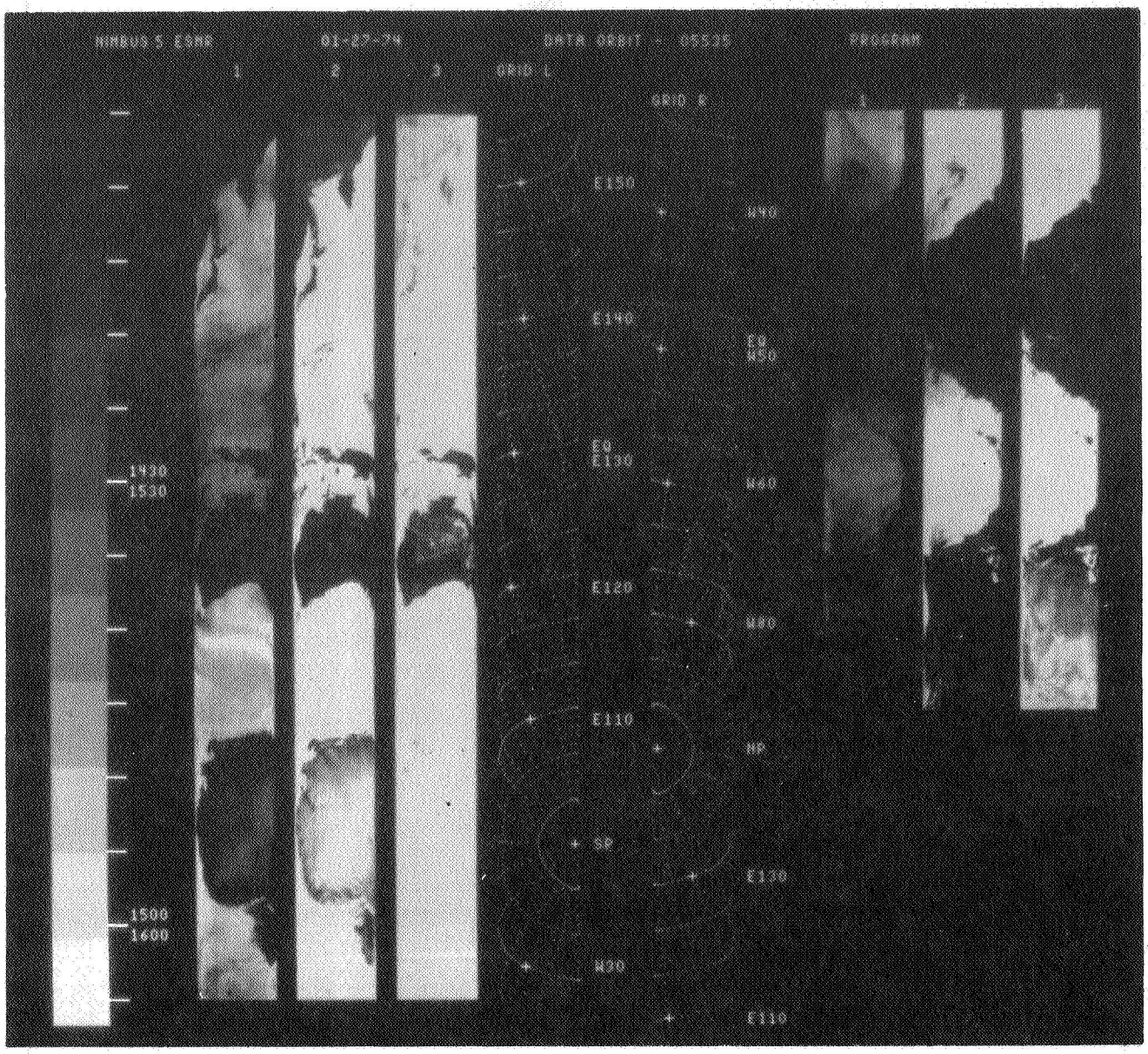

NIMBUS 5 ESMR
01-22-74
DATA ORBIT - 05464
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
W120
EQ
E50
EQ
W130
E40
W130
E30
W150
NP
SP
W130
E70
W140
E60
EQ
W150
0730
0830
0800
0900

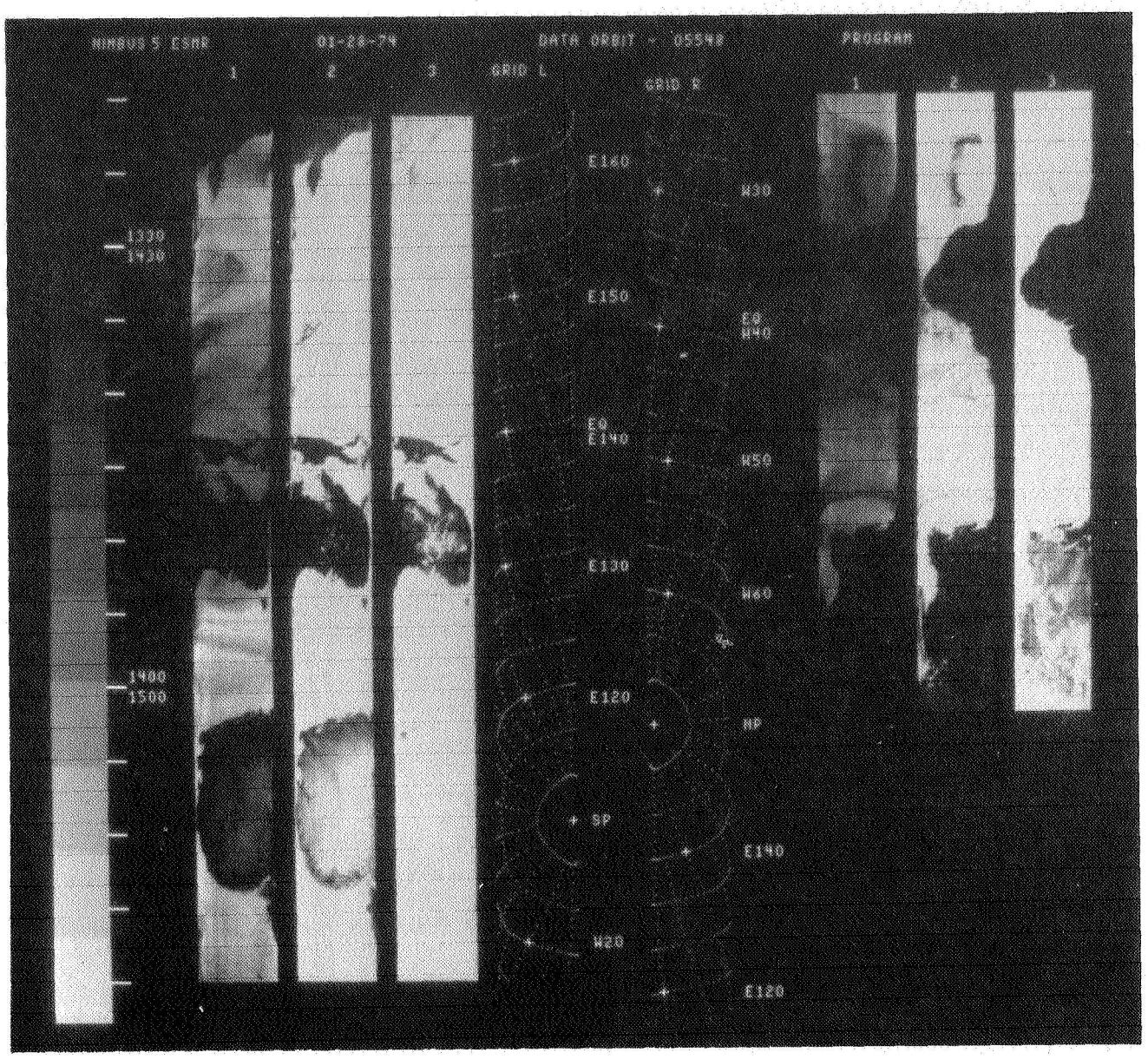

NIMBUS 5 ESMR
01-23-74
DATA ORBIT - 05932
PROGRAM
1
2
3
GRID L
GRID R
N50
E120
N40
1510
1620
E120
E0
N30
E0
E110
N30
E100
N20
1600
1700
E90
NP
SP
E110

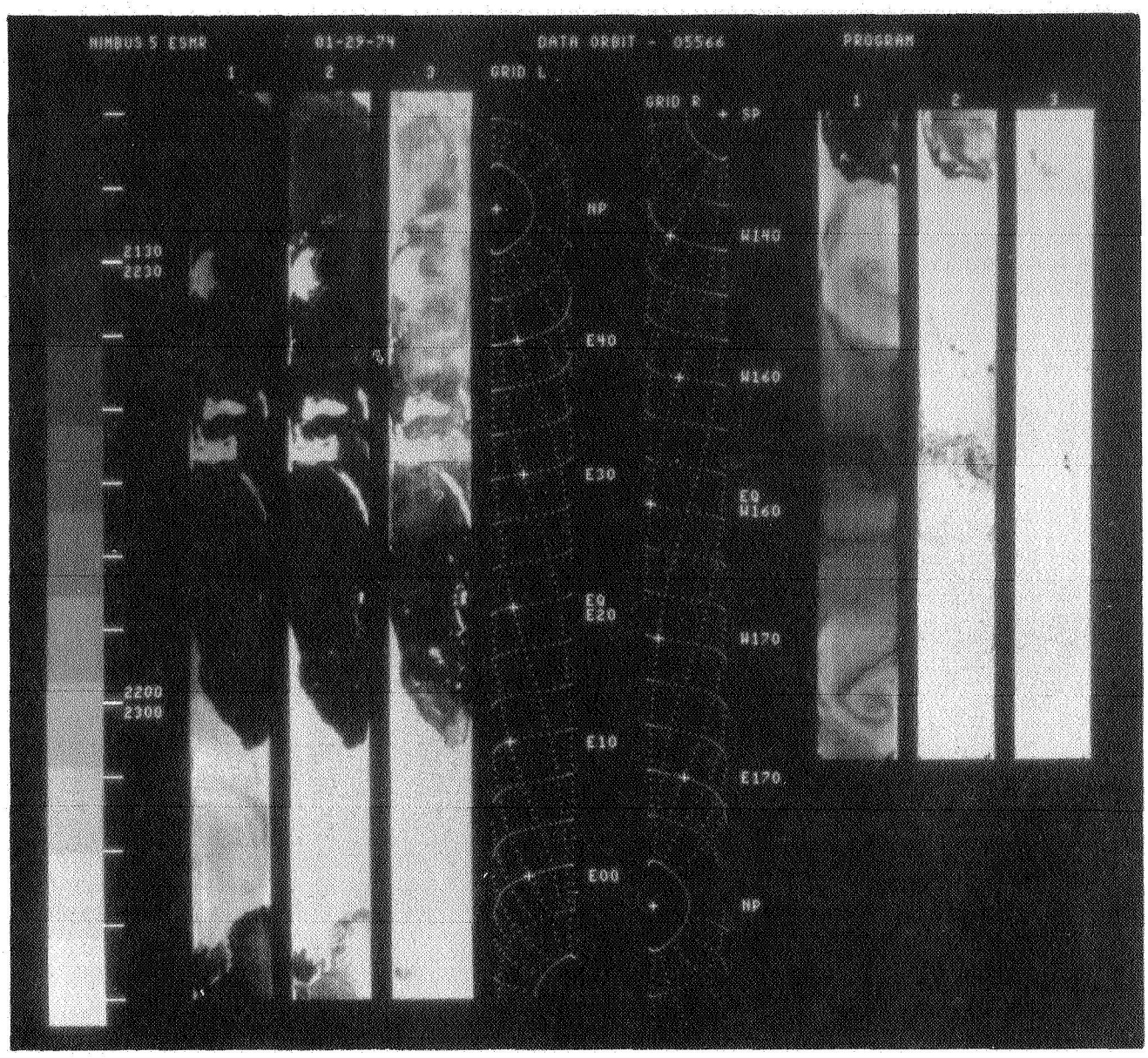

NIMBUS 5 ESMR
01-24-74
DATA ORBIT - 05922
PROGRAM
GRID L
GRID M
1
2
3
W120
E20
W150
E0
E20
E0
W160
E10
W160
E00
W120
NP
SP
W160
E40
W180
0920
1030
1000
1100

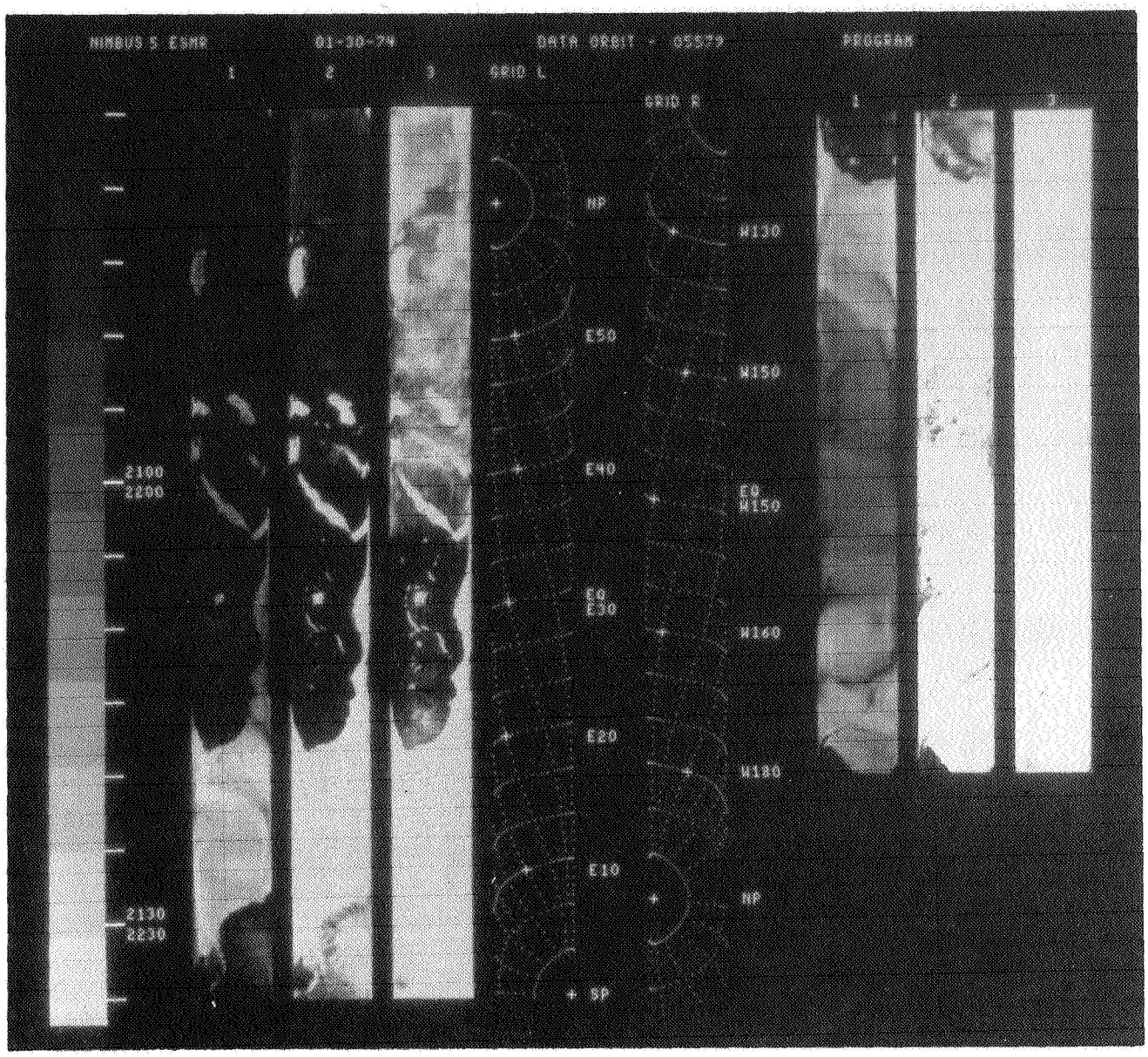

NIMBUS 5 ESMR
01-25-74
DATA ORBIT - 05511
PROGRAM
1900
2000
1930
2030
1
2
3
GRID L
GRID R
NP
E80
E60
EQ
E50
E50
E30
SP
W110
W120
EQ
W130
W140
W150
NP
E50

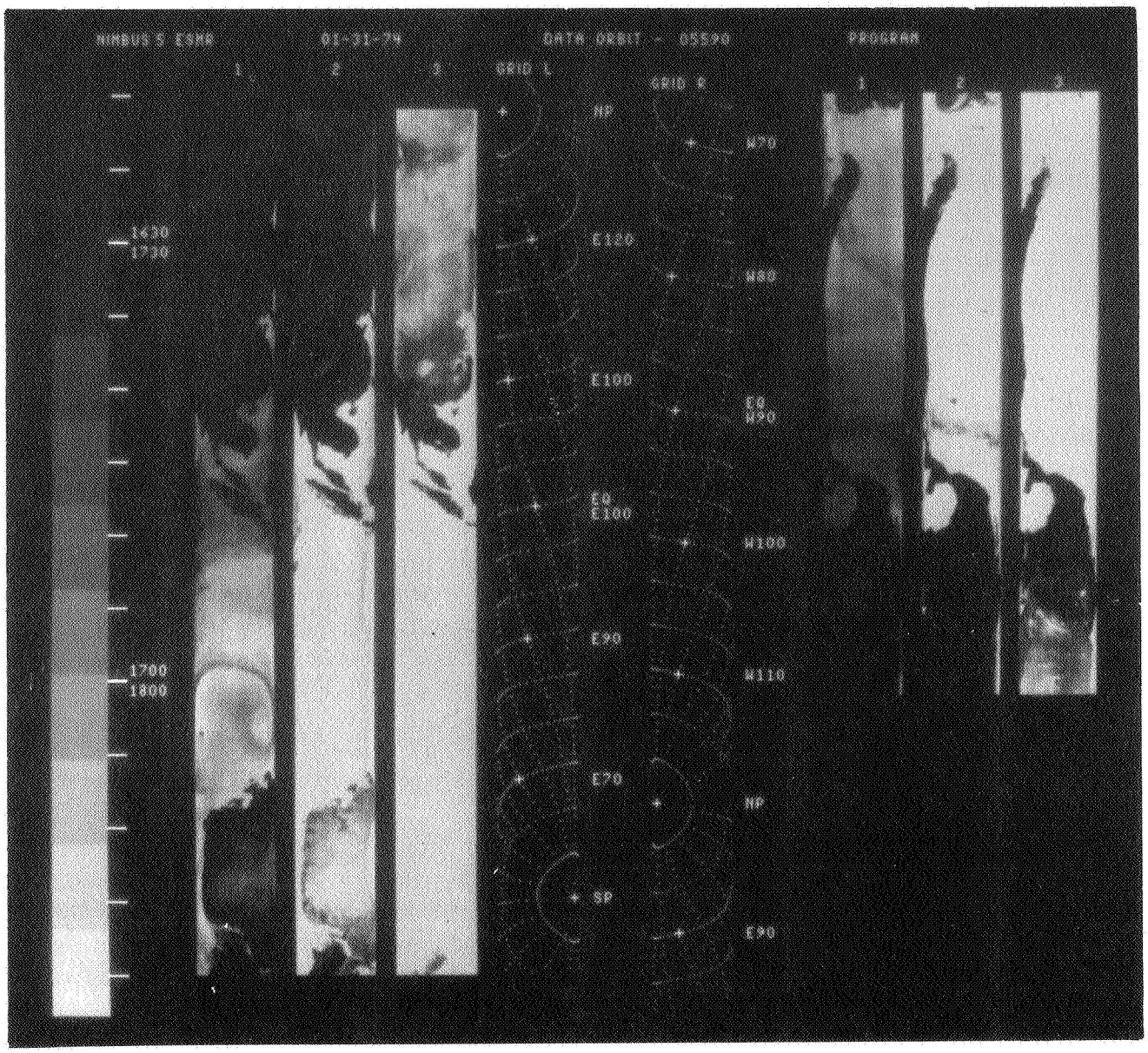

NIMBUS 5 ESMR
01-24-74
DATA ORBIT - 05514
PROGRAM
1
2
3
GRID L
GRID R
E90
E160
W20
EQ
E150
EQ
W30
E140
W30
E130
W50
NP
SP
W30
E170
W50
0100
0200
0130
0230


NIMBUS 5 ESMR
01-27-74
DATA ORBIT - 05525
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
E150
N40
E140
EQ
N50
EQ
E130
N60
E120
N80
E110
NP
SP
E130
N30
E110
1430
1530
1500
1600


NIMBUS 5 ESMR
01-22-74
DATA ORBIT - 05548
PROGRAM
1
2
3
GRID L
GRID R
E140
W30
E150
EQ
W40
EQ
E140
W50
E130
W60
NP
E120
SP
E140
W20
E120
1330
1430
1400
1500


NIMBUS 5 ESMR
01-29-74
ORBIT - 05544
PROGRAM
GRID L
GRID R
SP
NP
W140
E40
W160
E30
EQ
W160
EQ
E20
W170
E10
E170
E00
NP
2130
2230
2200
2300


NIMBUS 5 ESMR
01-30-74
DATA ORBIT - 05579
PROGRAM
1
2
3
GRID L
GRID R
NP
W130
E50
W150
2100
2200
E40
EQ
W150
EQ
E30
W160
E20
W180
E10
NP
2130
2230
SP


NIMBUS 5 ESMR
01-31-74
DATA ORBIT - 05590
PROGRAM
GRID L
GRID R
1430
1710
1700
1800
NP
W70
E150
W80
E100
E0
W90
E0
E100
W100
E90
W110
E70
NP
SP
E90

SECTION 4

TEMPERATURE HUMIDITY INFRARED RADIOMETER MONTAGES

This section pictorially documents the data from the Temperature Humidity Infrared Radiometer subsystem carried on the Nimbus 5 Meteorological Satellite. Section 4.1 contains all nighttime THIR 11.5 and 6.7 micrometer montages and Section 4.2 contains all daytime THIR 11.5 and 6.7 micrometer montages, arranged in chronological order. Key latitudes can be read from the superposed grids. Grid points are identified where each swath crosses 60° N, 30° N, EQUATOR, 30° S, and 60° S.

Vellum Location Guide overlays, attached to the back of this document, may be used for general orientation with the data presented in each THIR montage. Proper alignment of the overlay grid is accomplished by matching the grid indices on the equator with the two "T" marks on each montage.

Each THIR montage is provided with a time scale to determine the Greenwich Mean Time limits required to order processed THIR grid print maps (see page 38, The Nimbus 5 User's Guide). The time scale is used to determine the number of minutes from ascending (daytime data) or descending (nighttime data) node time for the interval of data required. To obtain the GMT for daytime data, the measured time is to be added to the ascending node time in the northern hemisphere and subtracted in the southern hemisphere. For nighttime data, the measured time is to be subtracted from the descending node time in the northern hemisphere and added in the southern hemisphere. The ascending and descending node times are given in Table 2-2 of Section 2.

The following alternate procedure also establishes GMT limits. Knowing the latitude limits of the study area, the minutes from ascending or descending node can be directly interpolated from Table 4-1. These time values can then be added to or subtracted from node times given in Table 2-2 of Section 2.

A description of the THIR experiment and instructions for ordering THIR data may be found in The Nimbus 5 User's Guide, Section 2.

Table 4-1

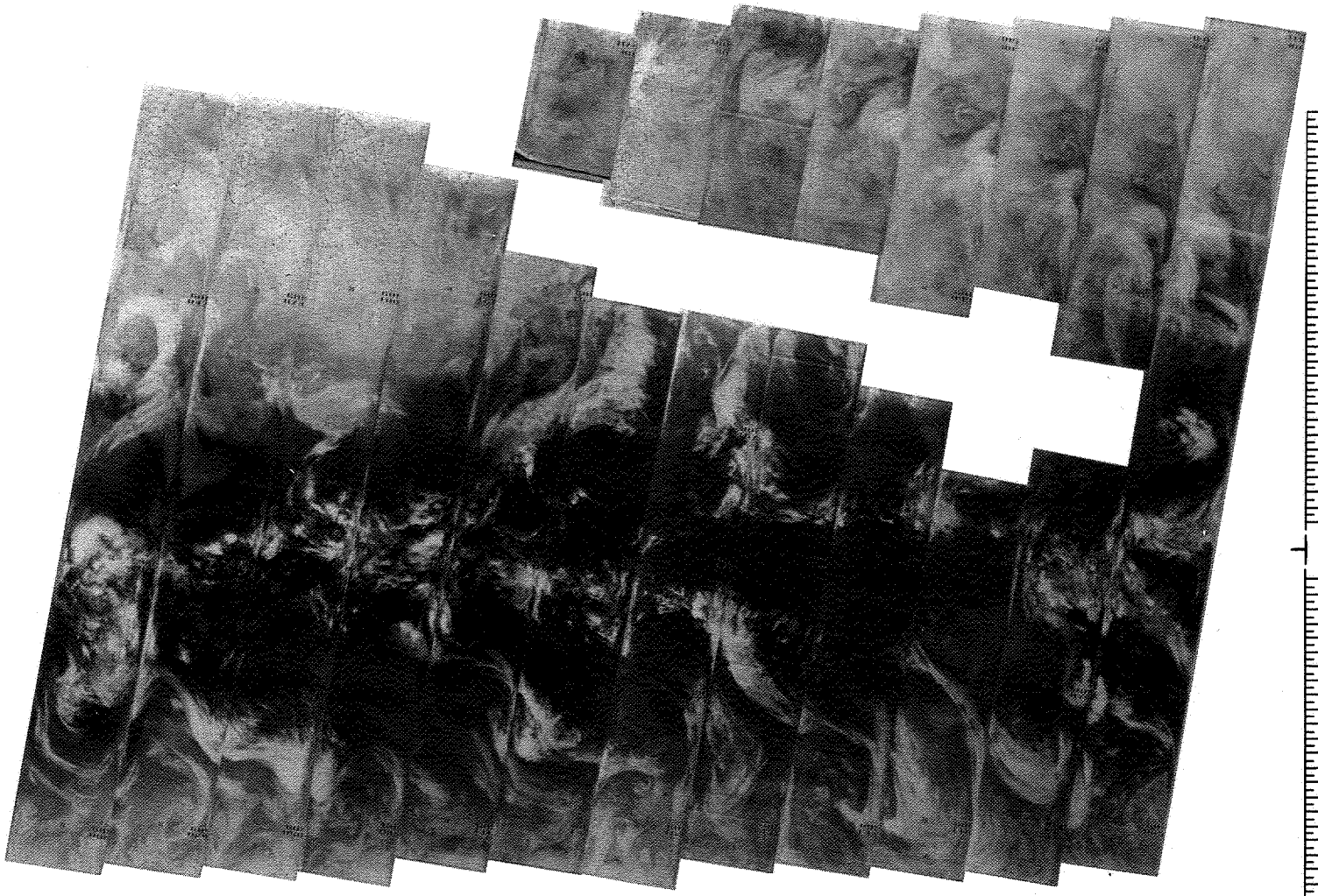
LATTIUDE VERSUS MINUTES FROM
ASCENDING OR DESCENDING NODE

Latitude from AN or DN	Minutes and Seconds from AN or DN
0	0:00
5	1:31
10	3:02
15	4:33
20	6:03
25	7:34
30	9:05
35	10:36
40	12:08
45	13:40
50	15:12
55	16:44
60	18:18
65	19:52
70	21:33
75	23:26
78	24:44
80.1	26:49
78	29:00
75	30:09
70	31:51
65	33:35

SECTION 4.1

TEMPERATURE HUMIDITY INFRARED RADIOMETER

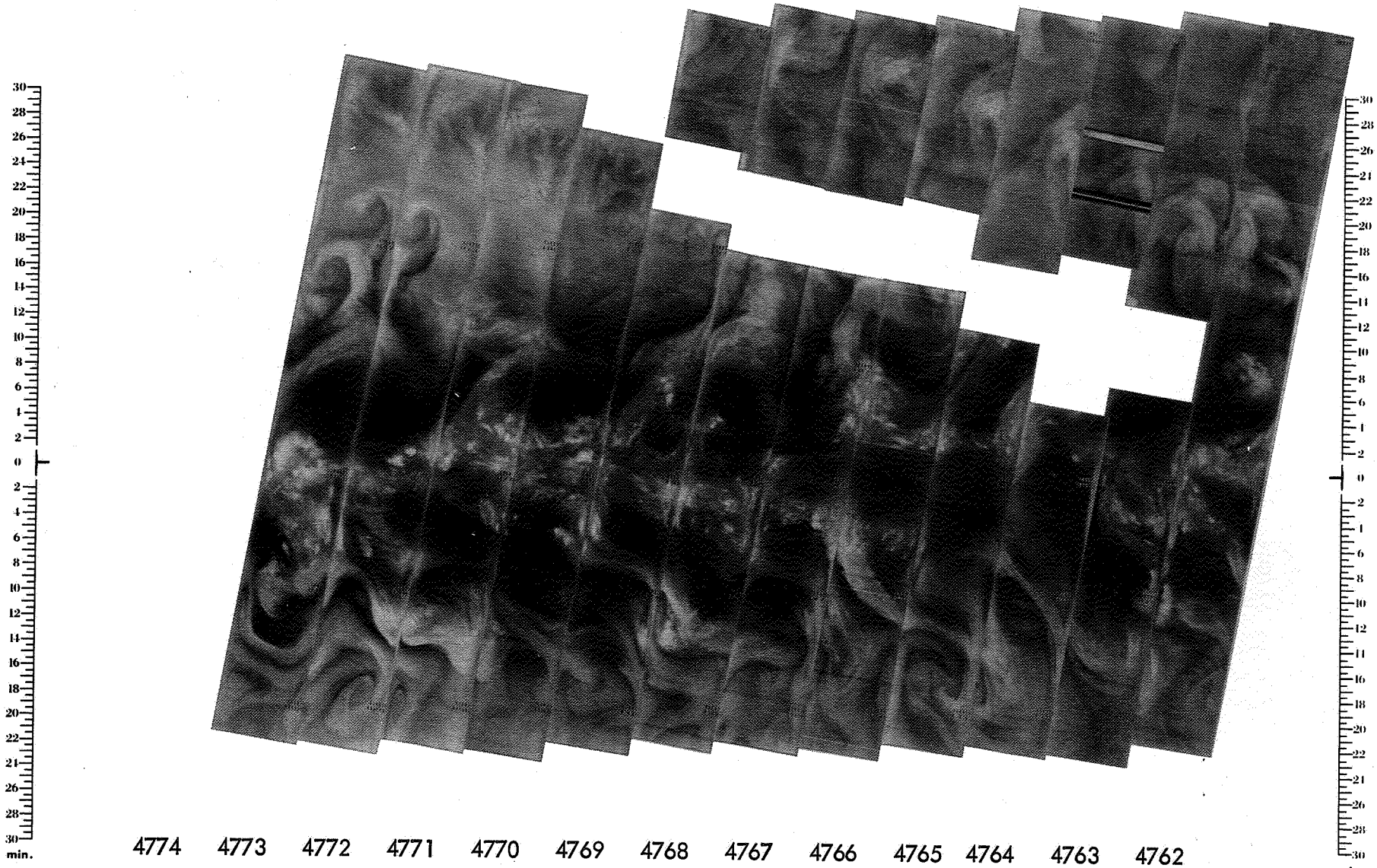
NIGHTTIME MONTAGES



4774 4773 4772 4771 4770 4769 4768 4767 4766 4765 4764 4763 4762

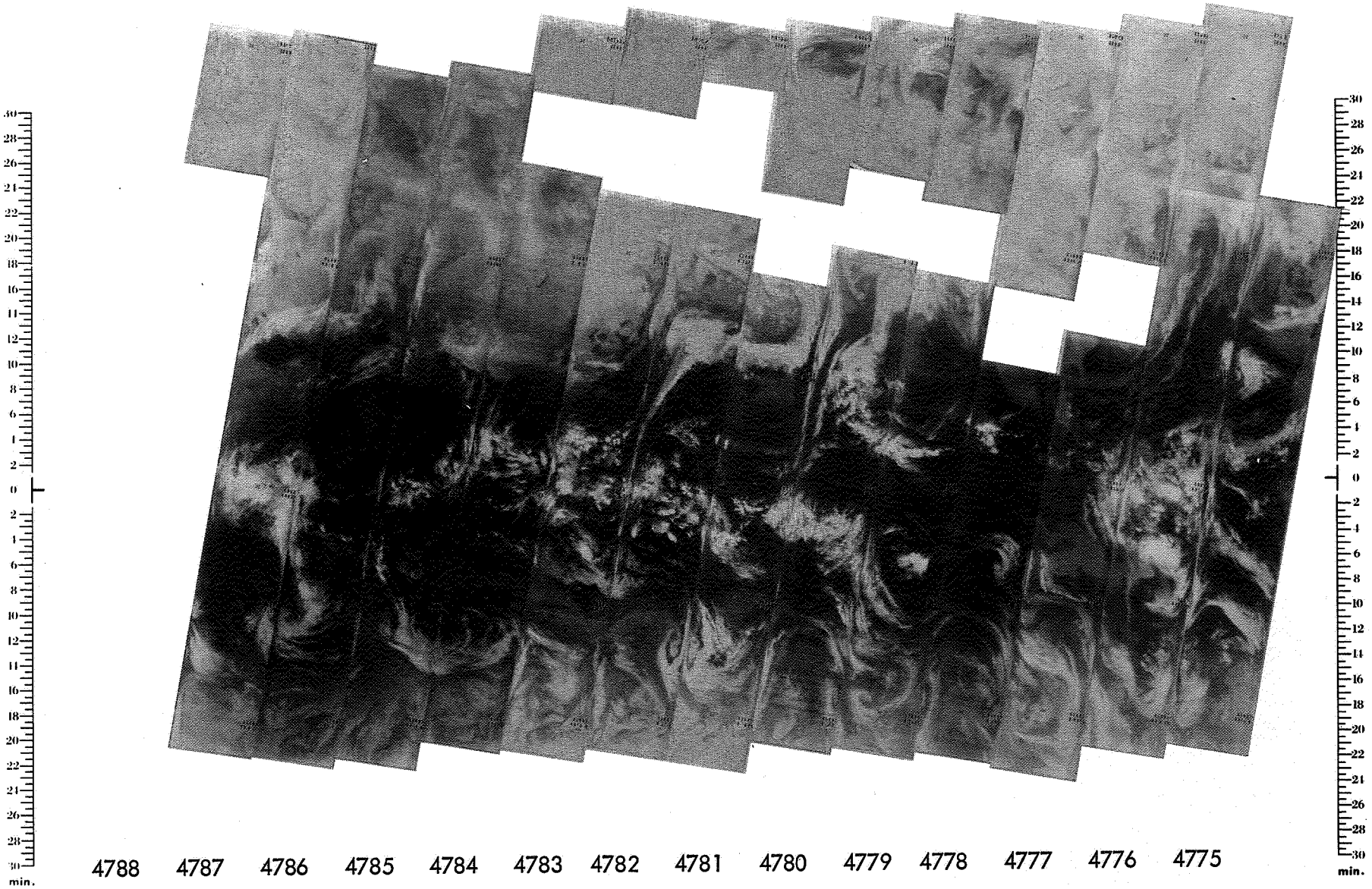
1 DECEMBER 1973

11.5 μm



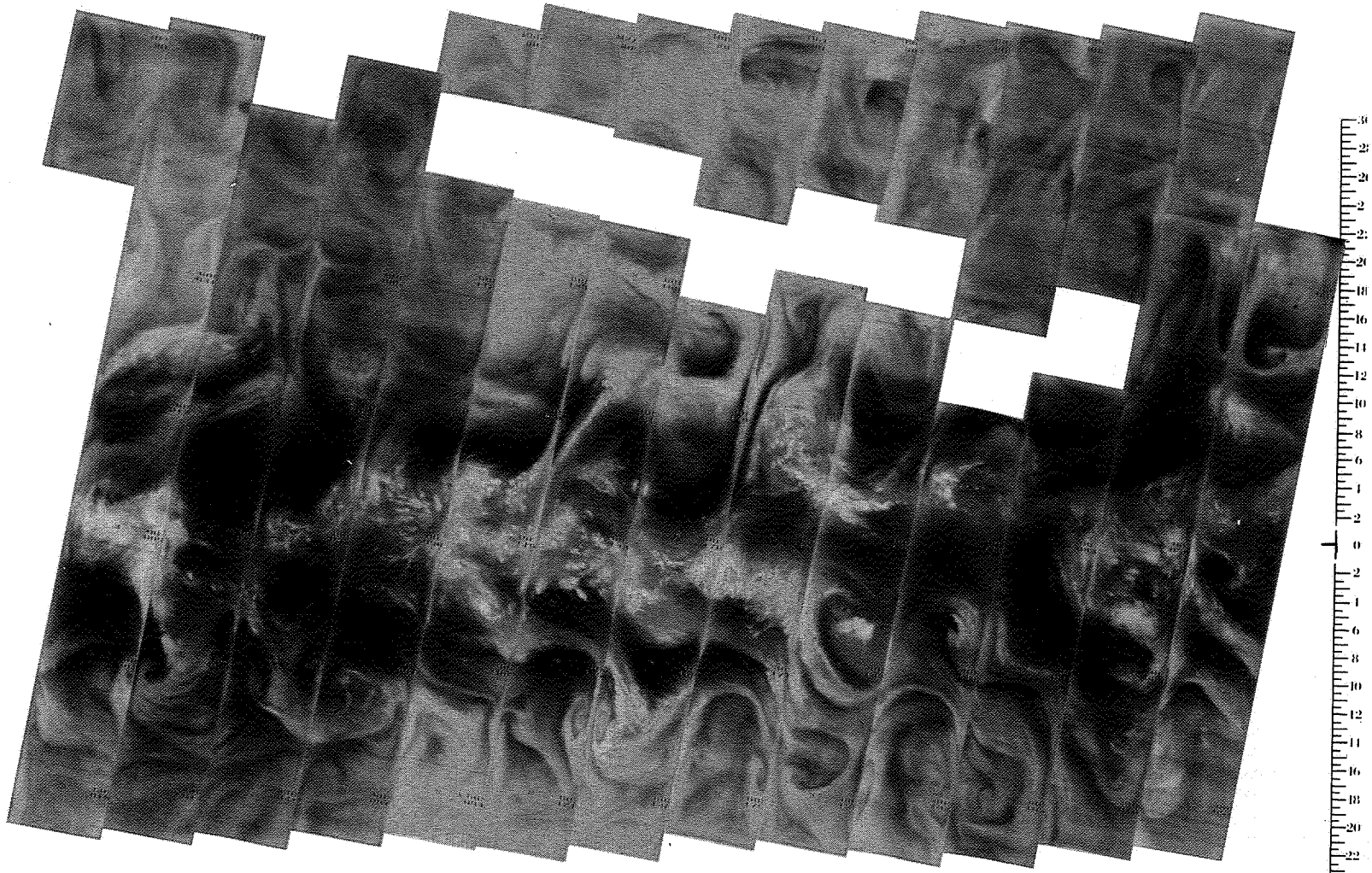
1 DECEMBER 1973

6.7 μm



2 DECEMBER 1973

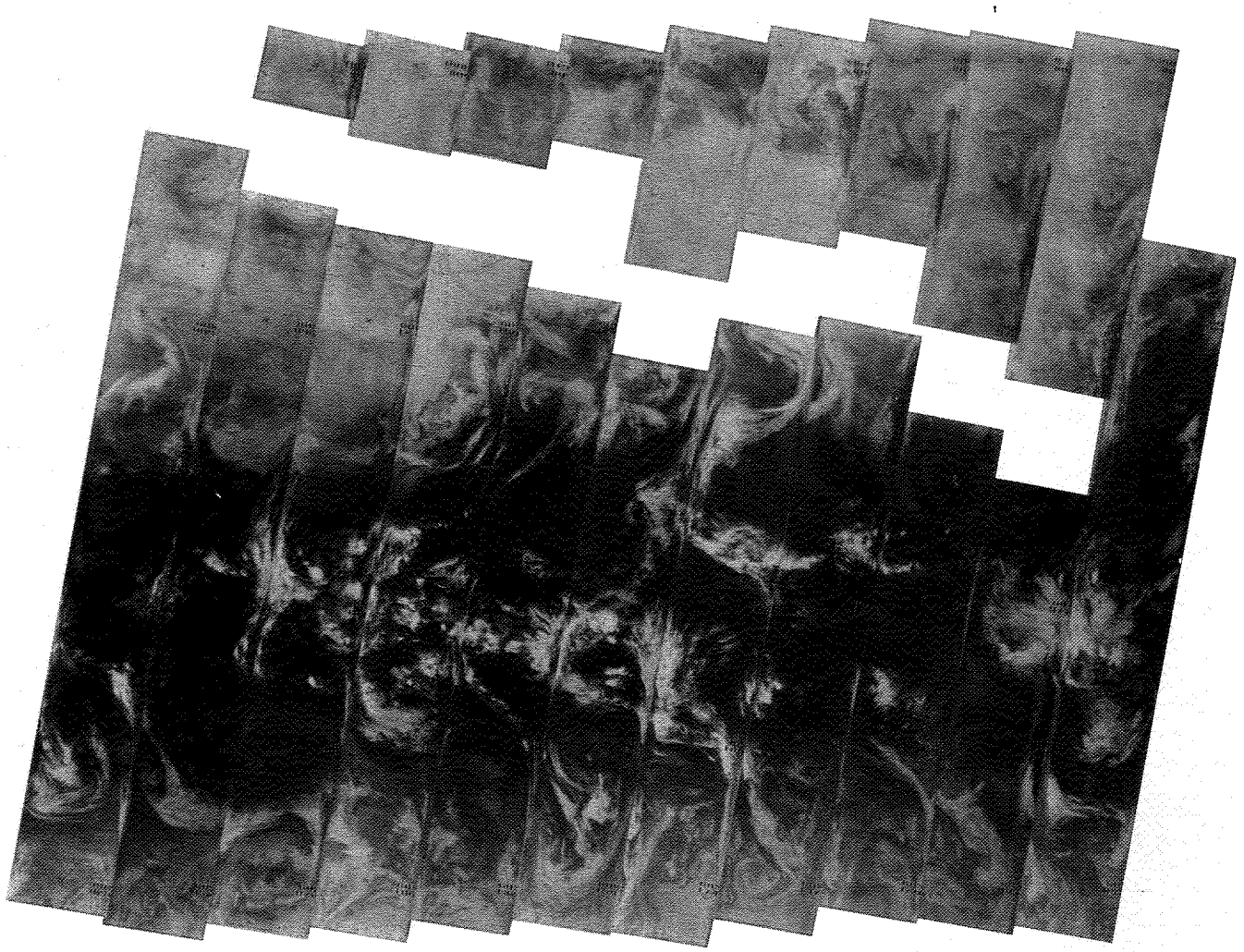
11.5 μm



4788 4787 4786 4785 4784 4783 4782 4781 4780 4779 4778 4777 4776 4775

2 DECEMBER 1973

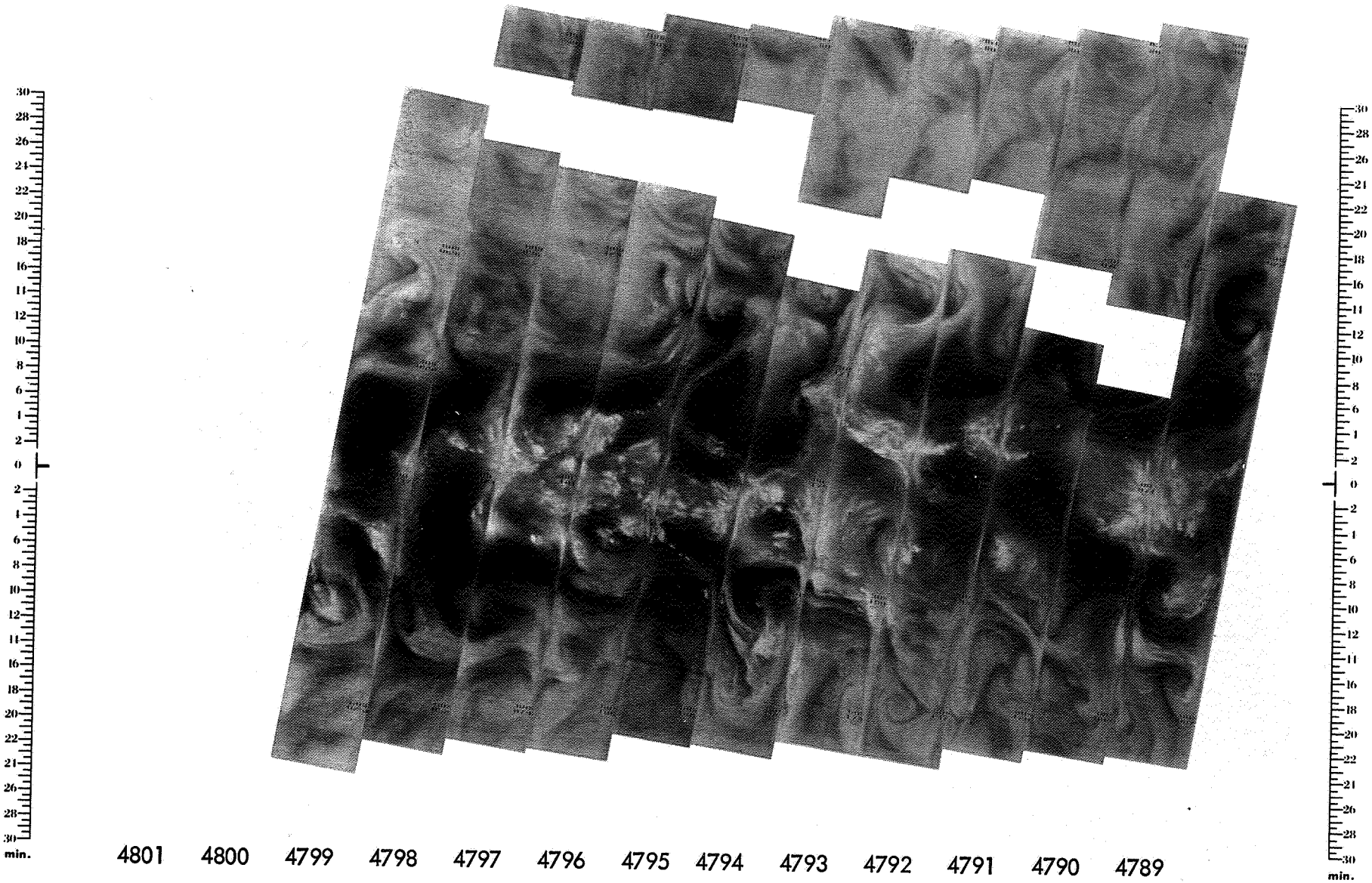
6.7 μm



4801 4800 4799 4798 4797 4796 4795 4794 4793 4792 4791 4790 4789

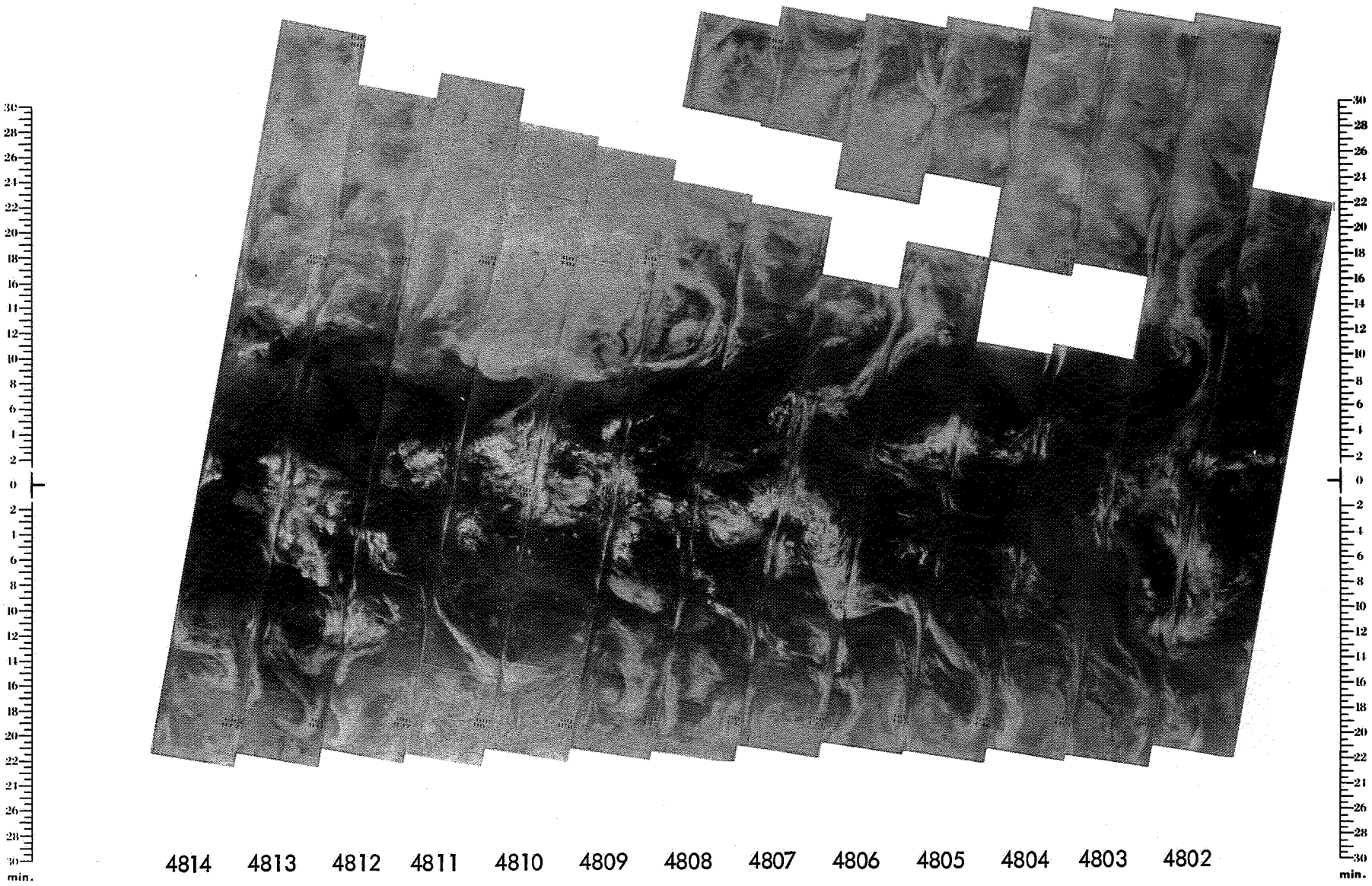
3 DECEMBER 1973

11.5 μm



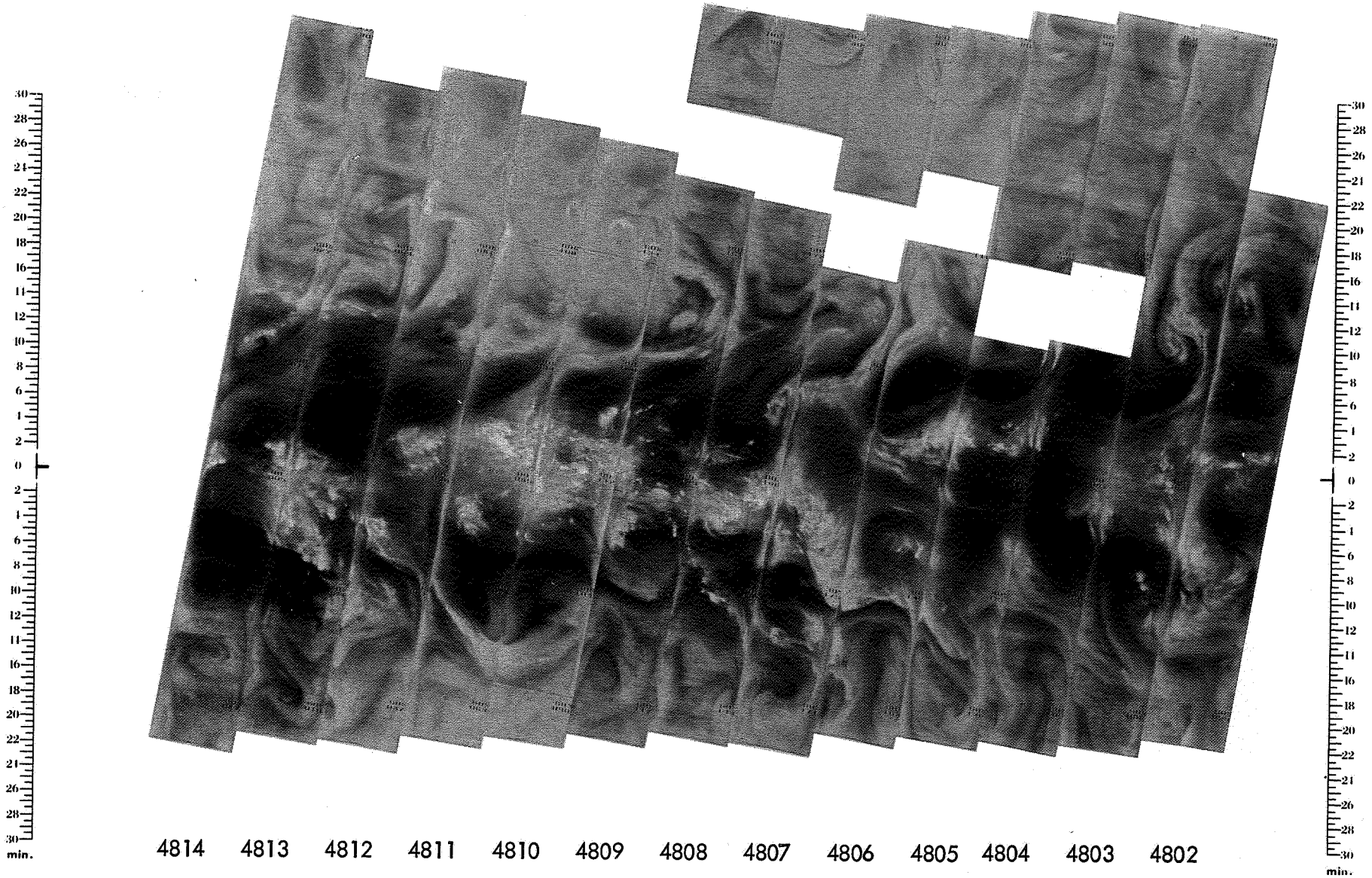
3 DECEMBER 1973

6.7 μm

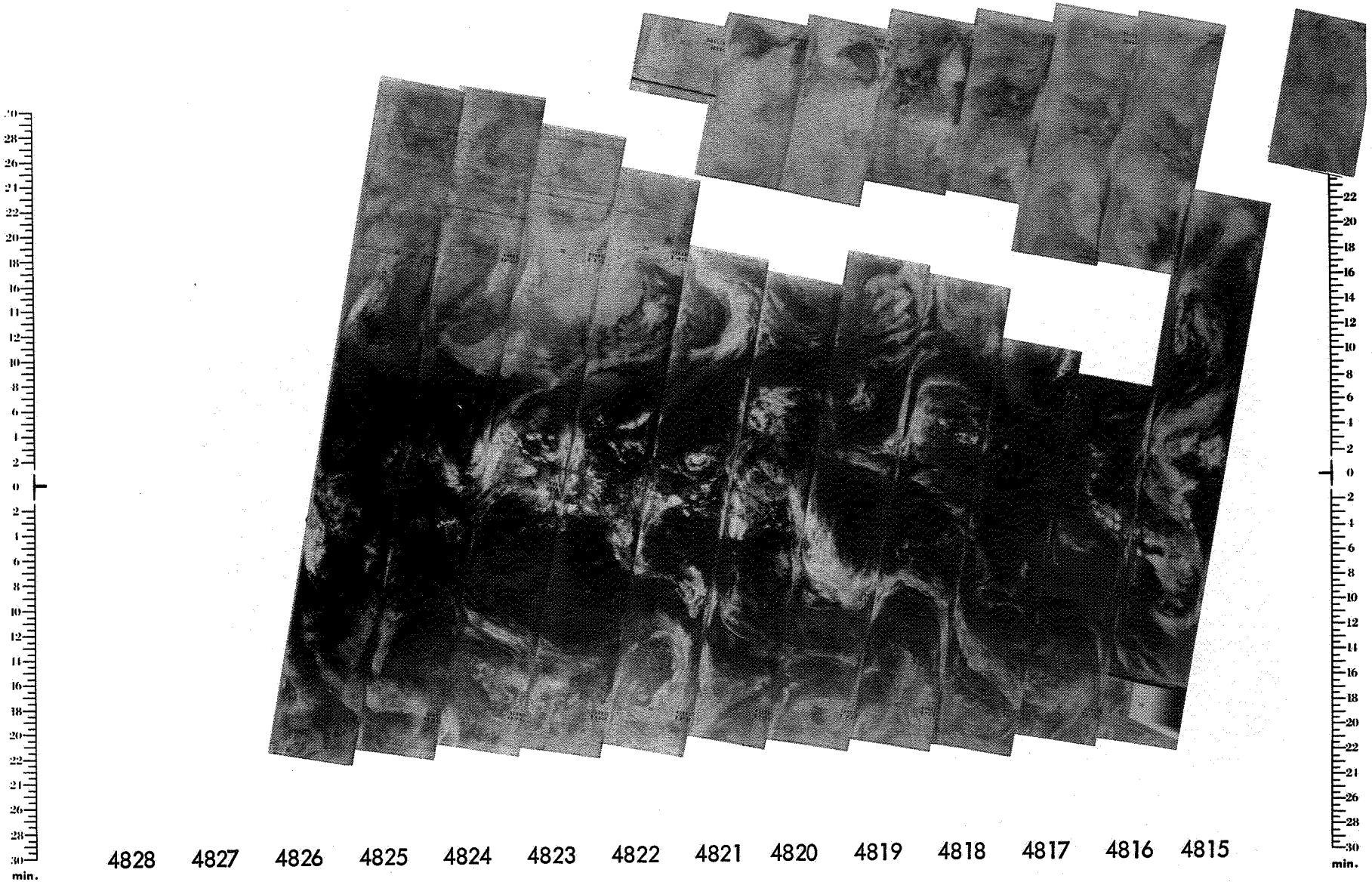


4 DECEMBER 1973

11.5 μm



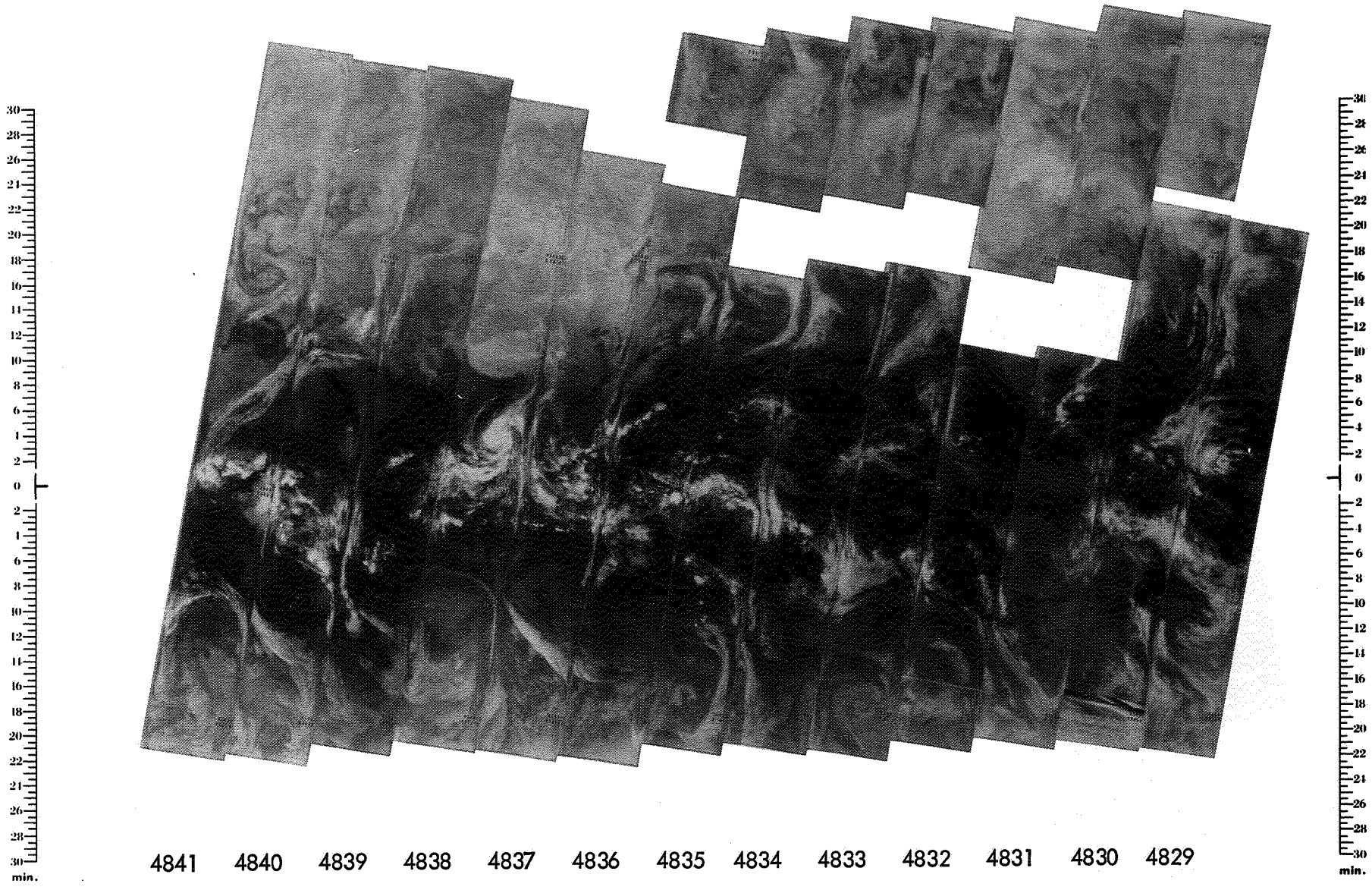
4 DECEMBER 1973
6.7 μm



5 DECEMBER 1973

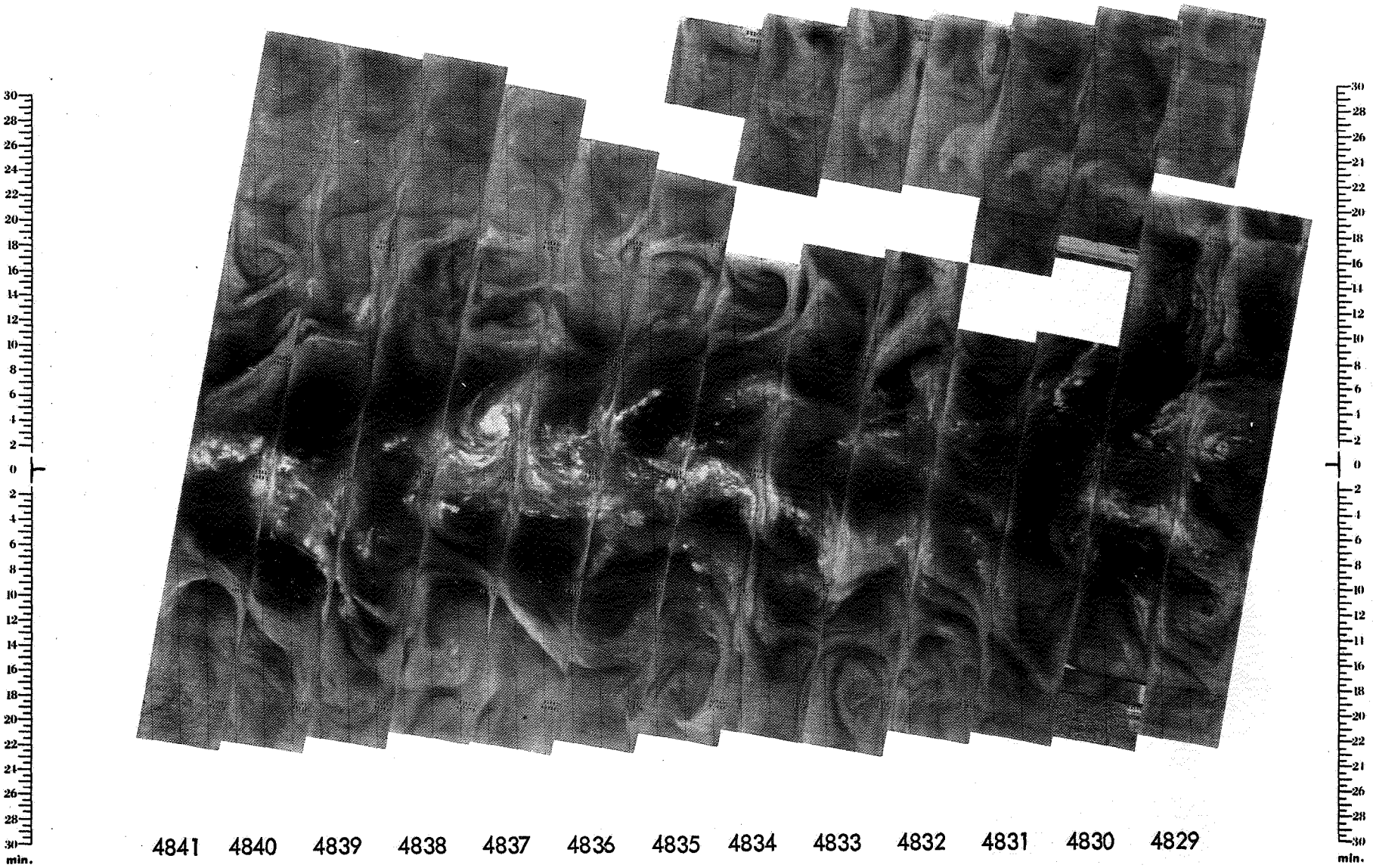
11.5 μm

4815
4816
4817
4818
4819
4820
4821
4822
4823
4824
4825
4826
4827
4828
5 DECEMBER 1973
6.7 μm
min.



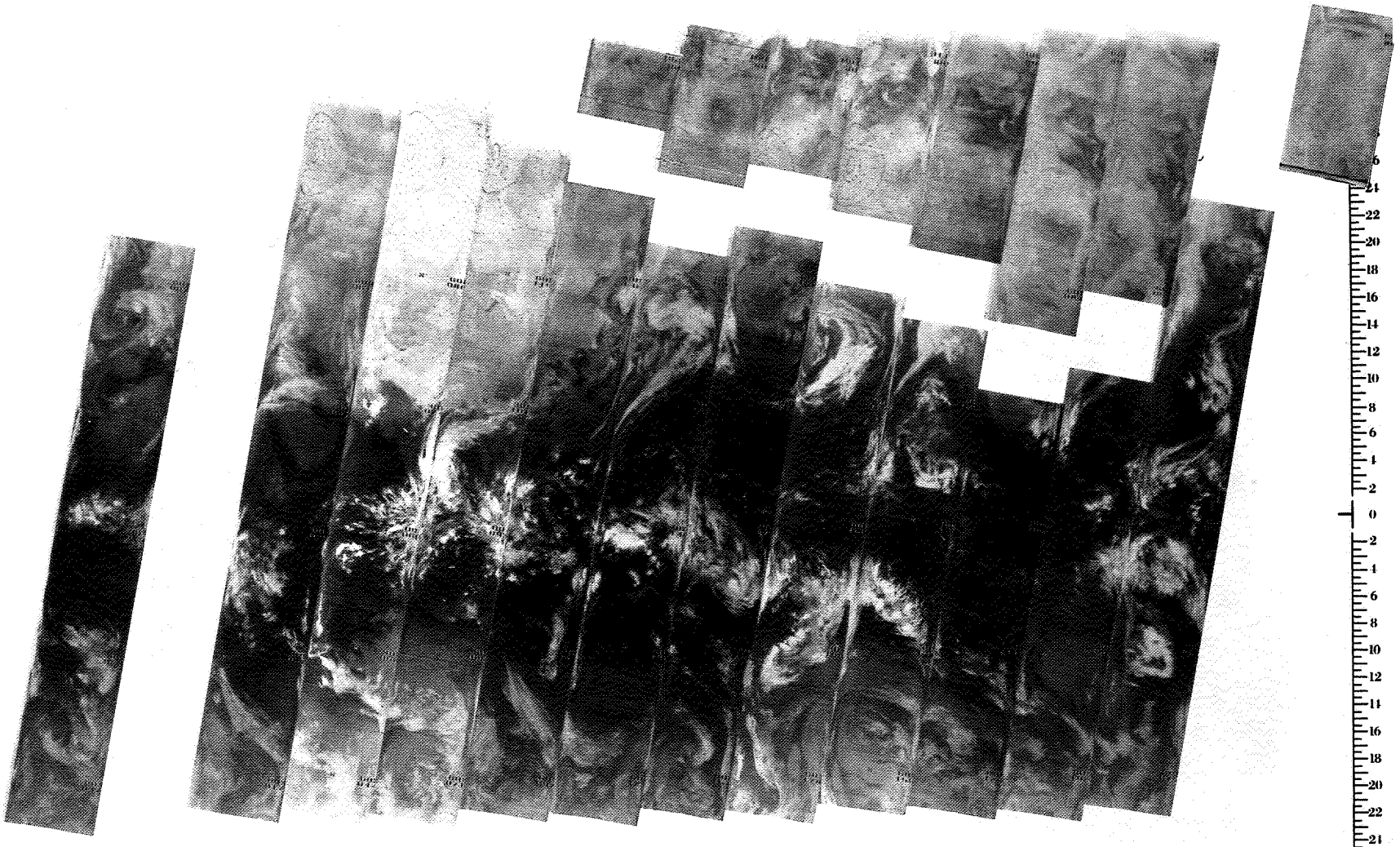
6 DECEMBER 1973

11.5 μm



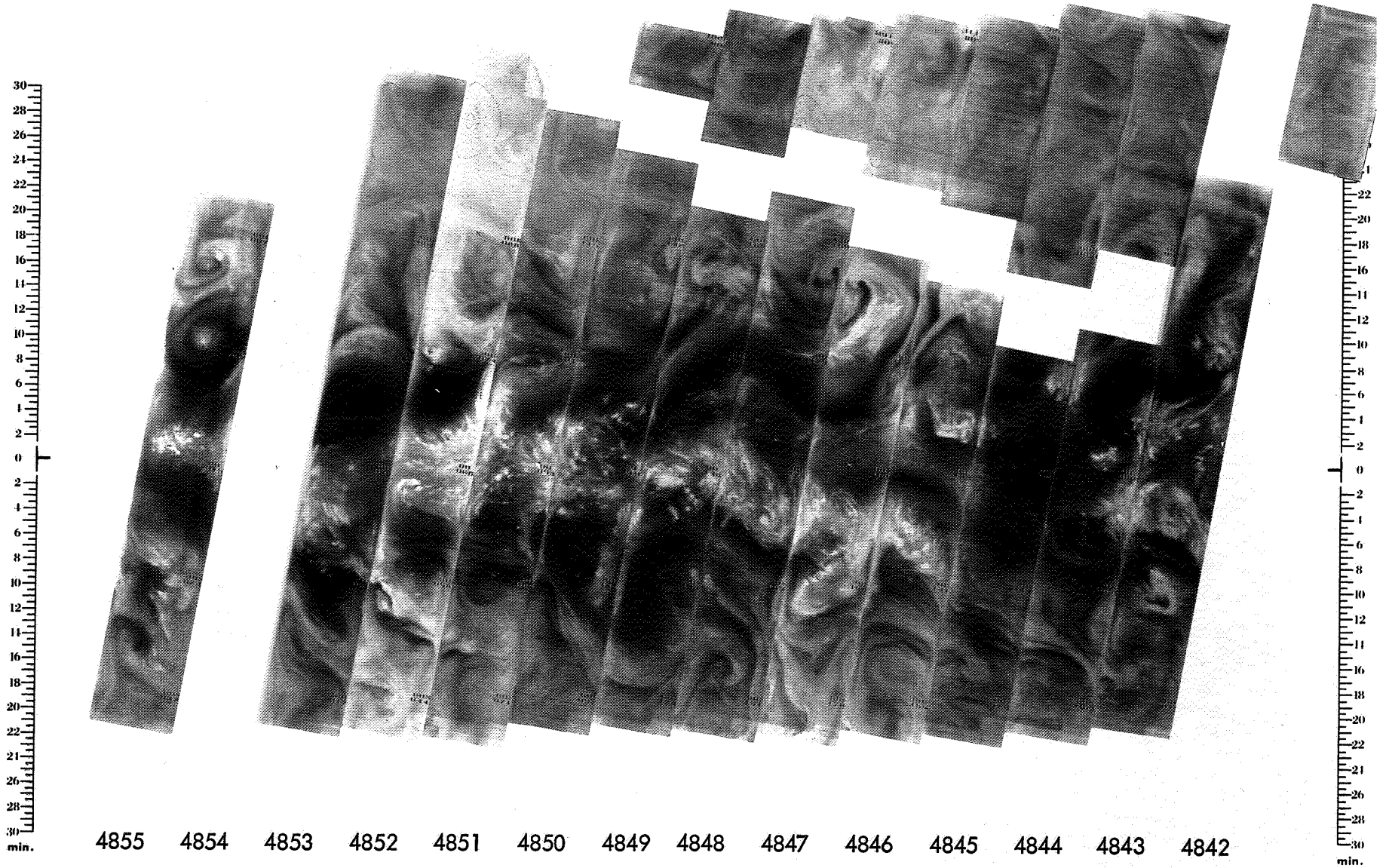
6 DECEMBER 1973

6.7 μm



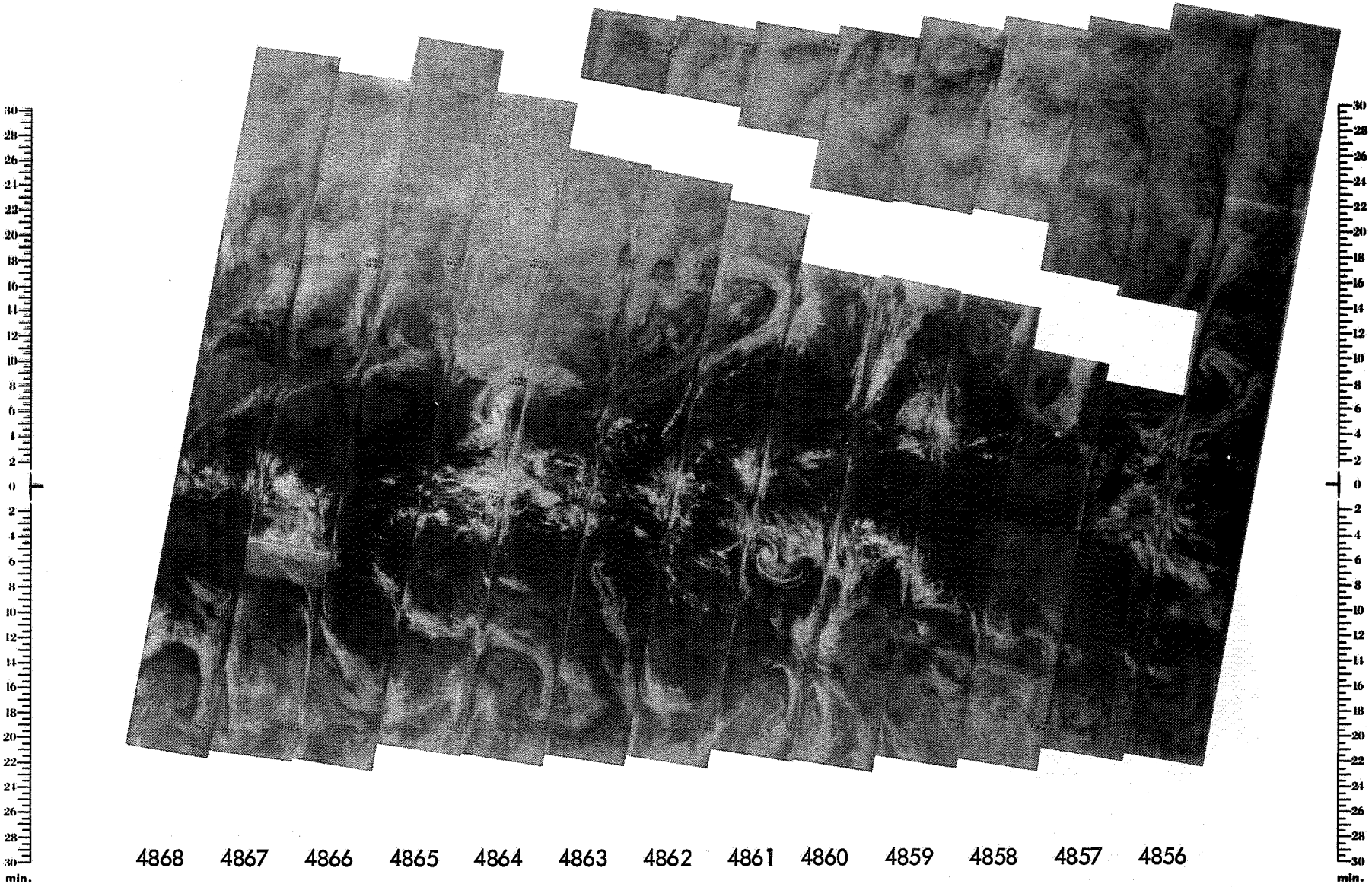
7 DECEMBER 1973

11.5 μm



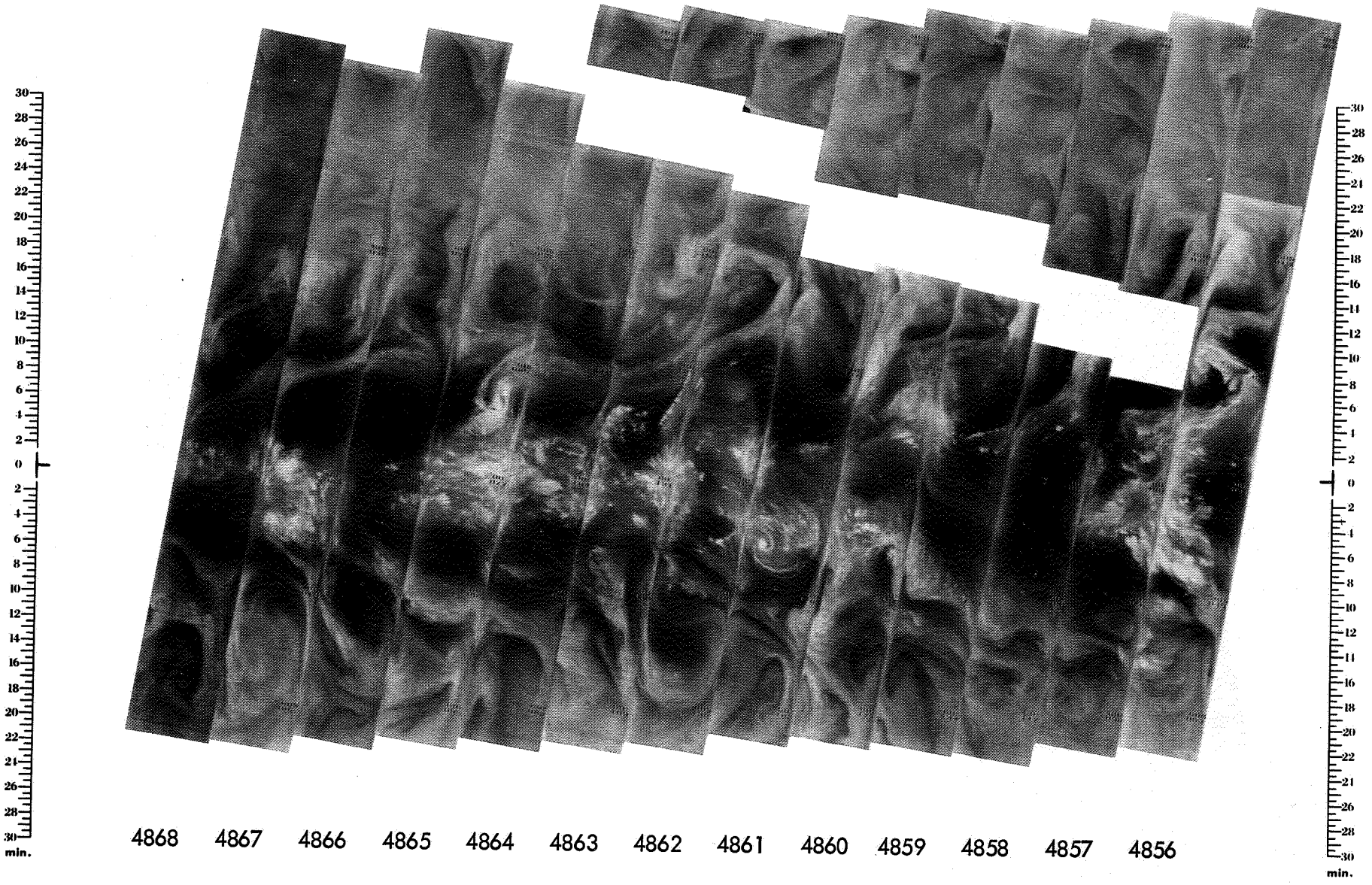
7 DECEMBER 1973

6.7 μm



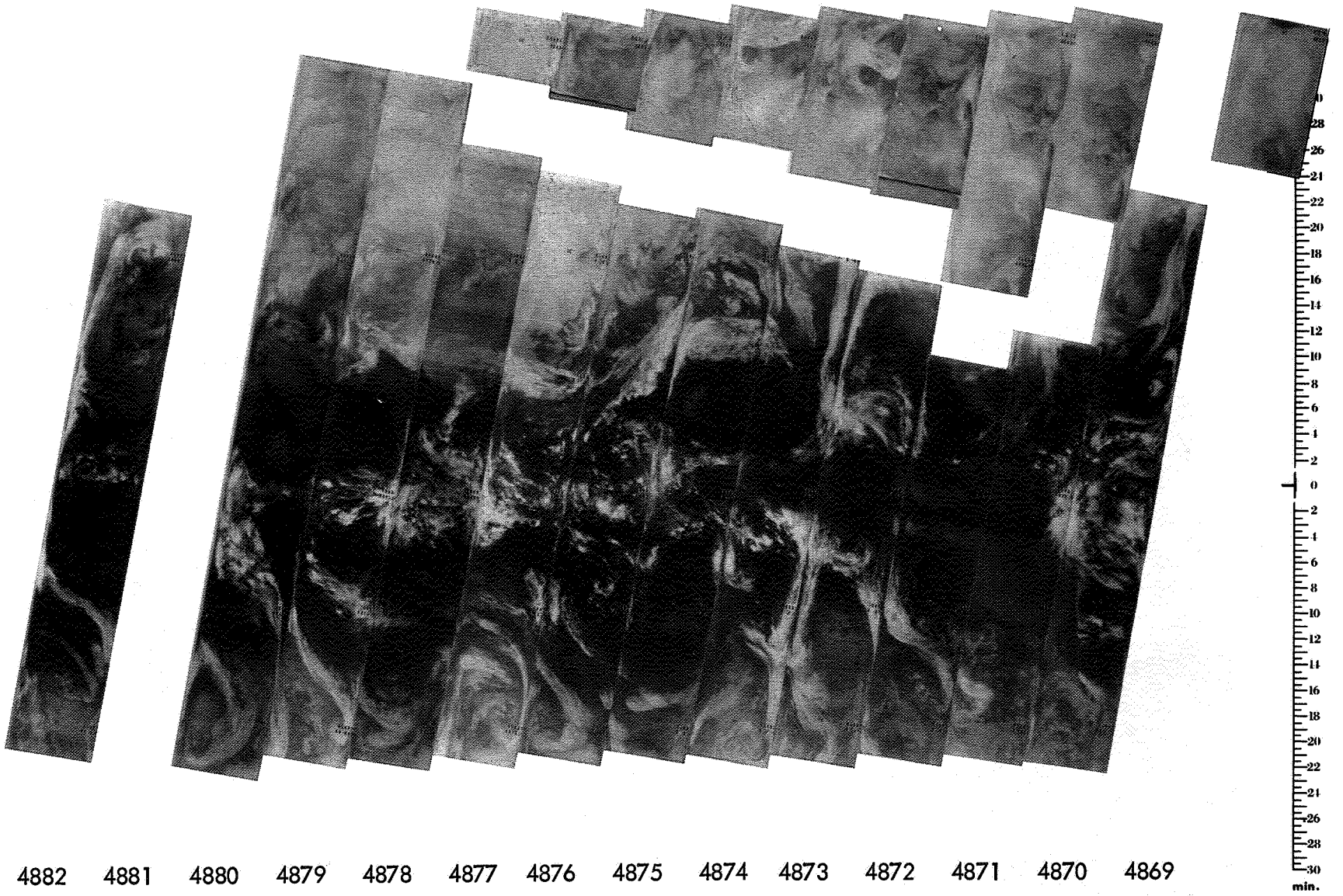
8 DECEMBER 1973

11.5 μm



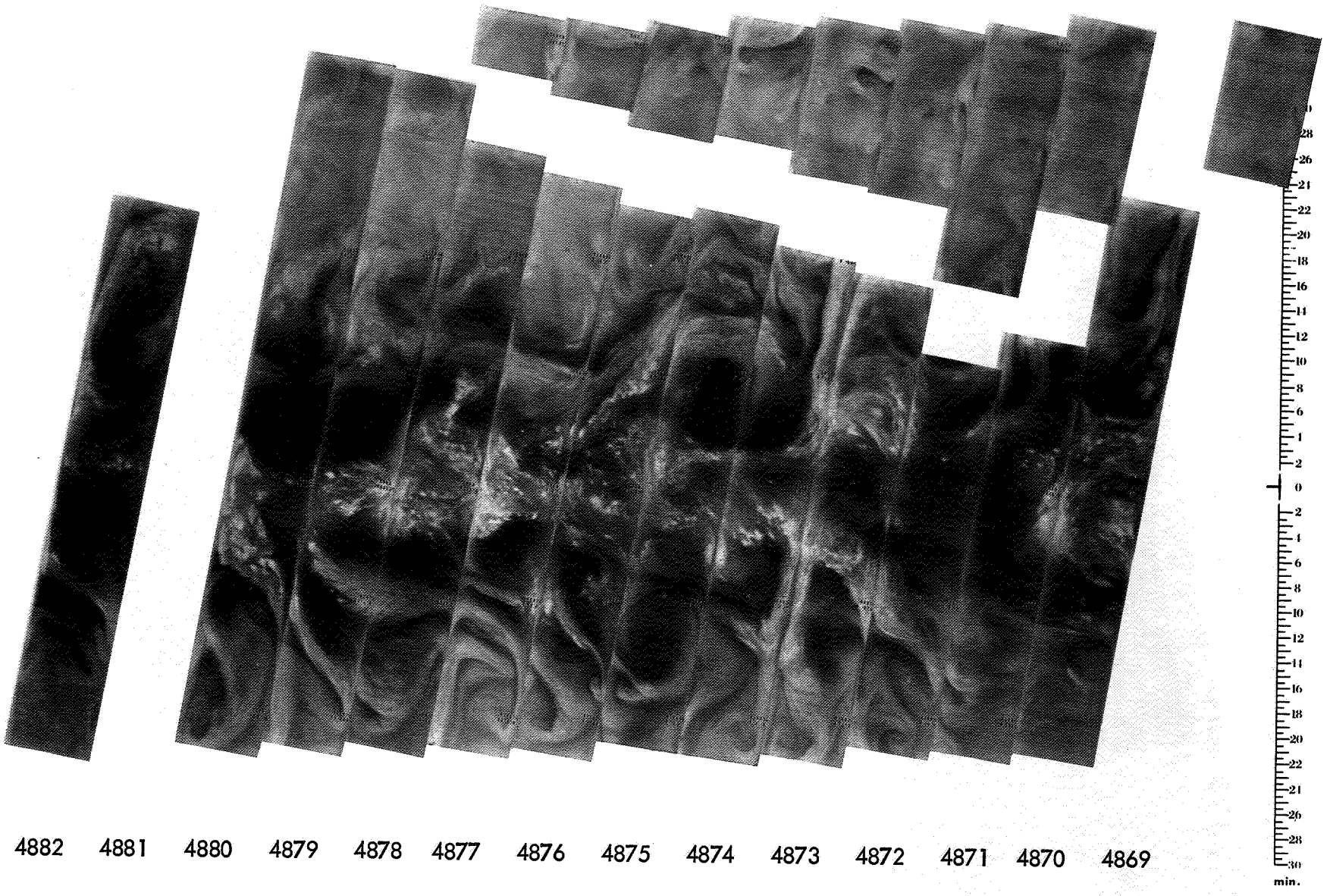
8 DECEMBER 1973

6.7 μm



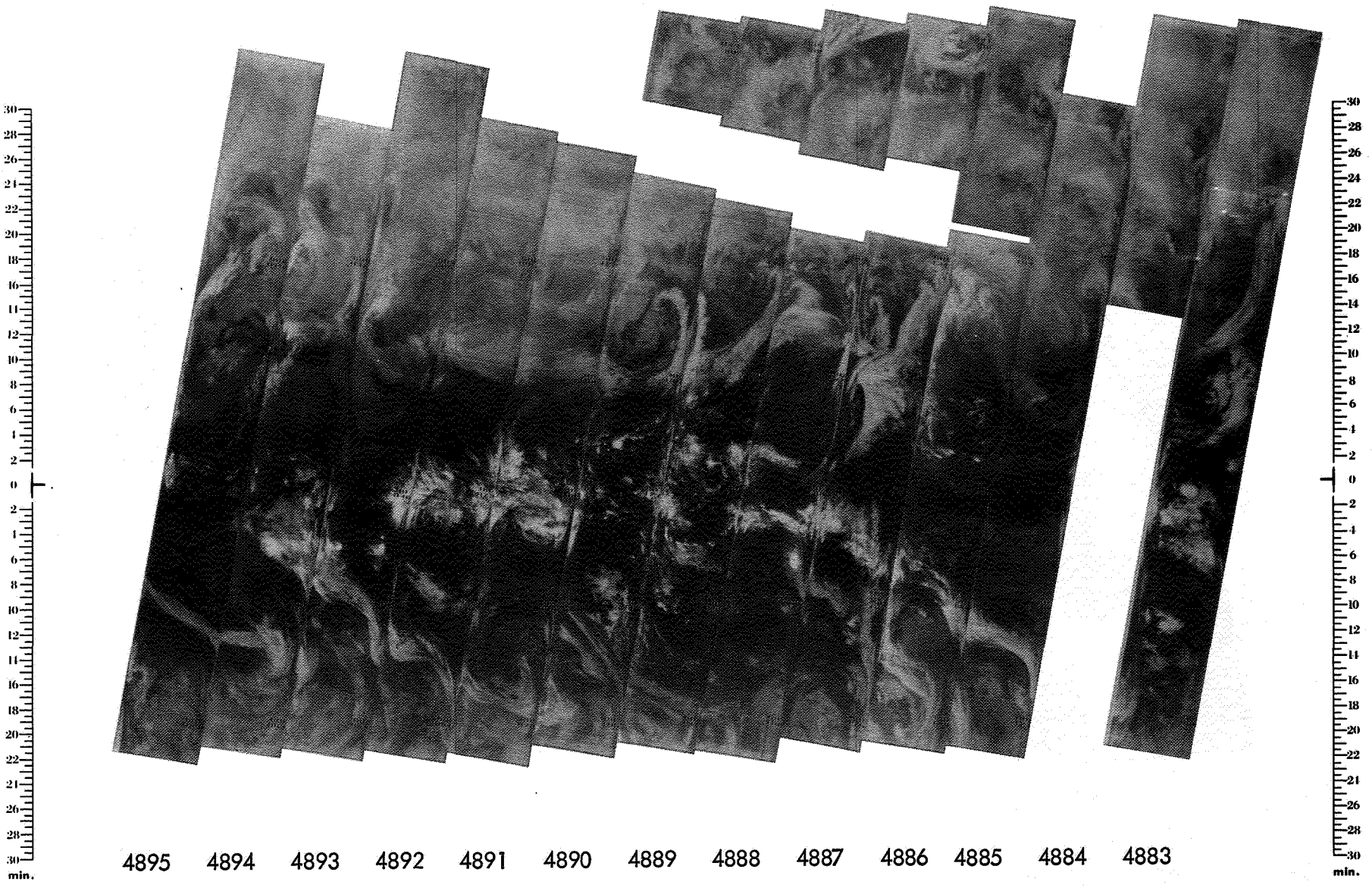
9 DECEMBER 1973

11.5 μm



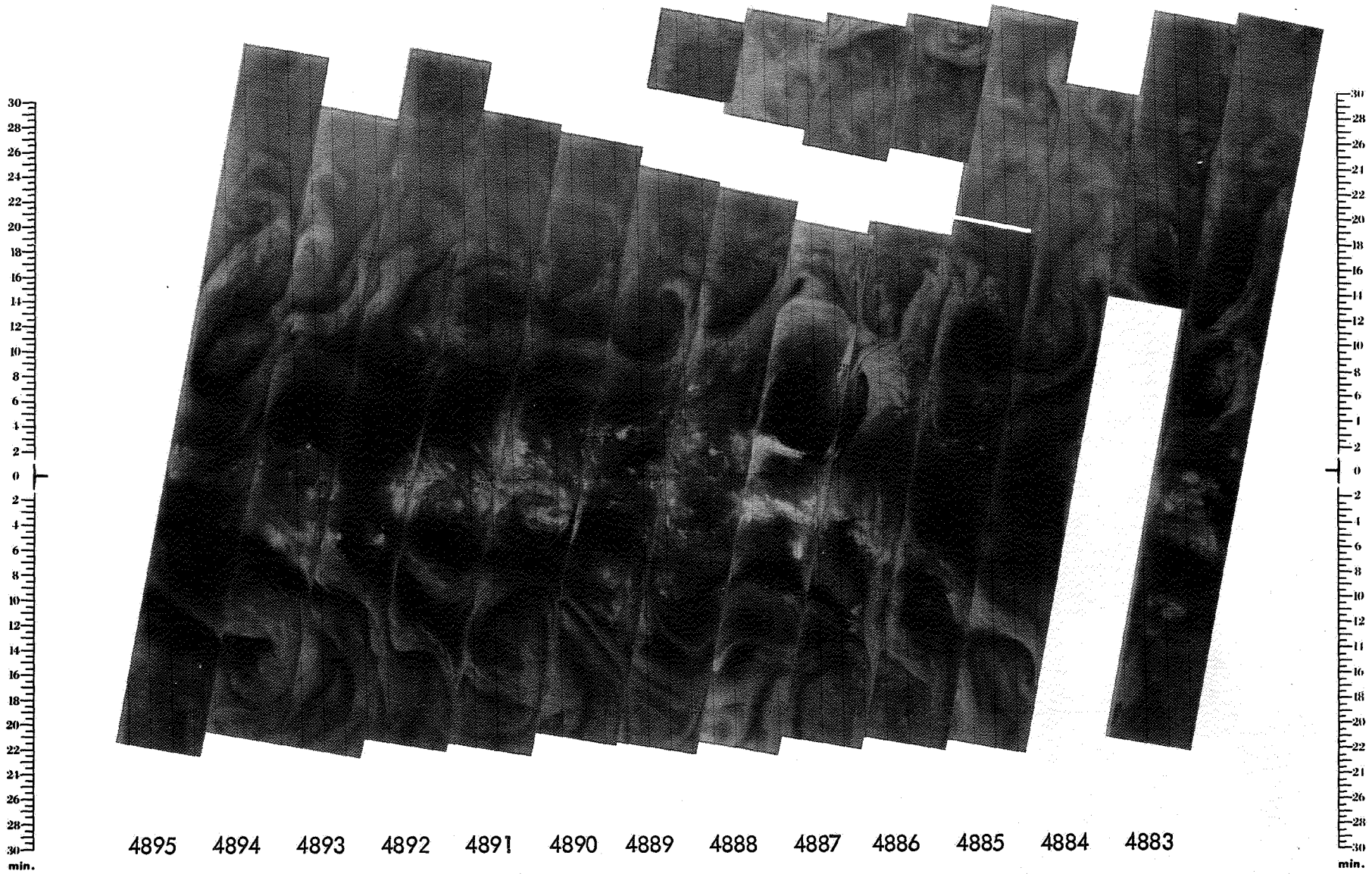
9 DECEMBER 1973

6.7 μm



10 DECEMBER 1973

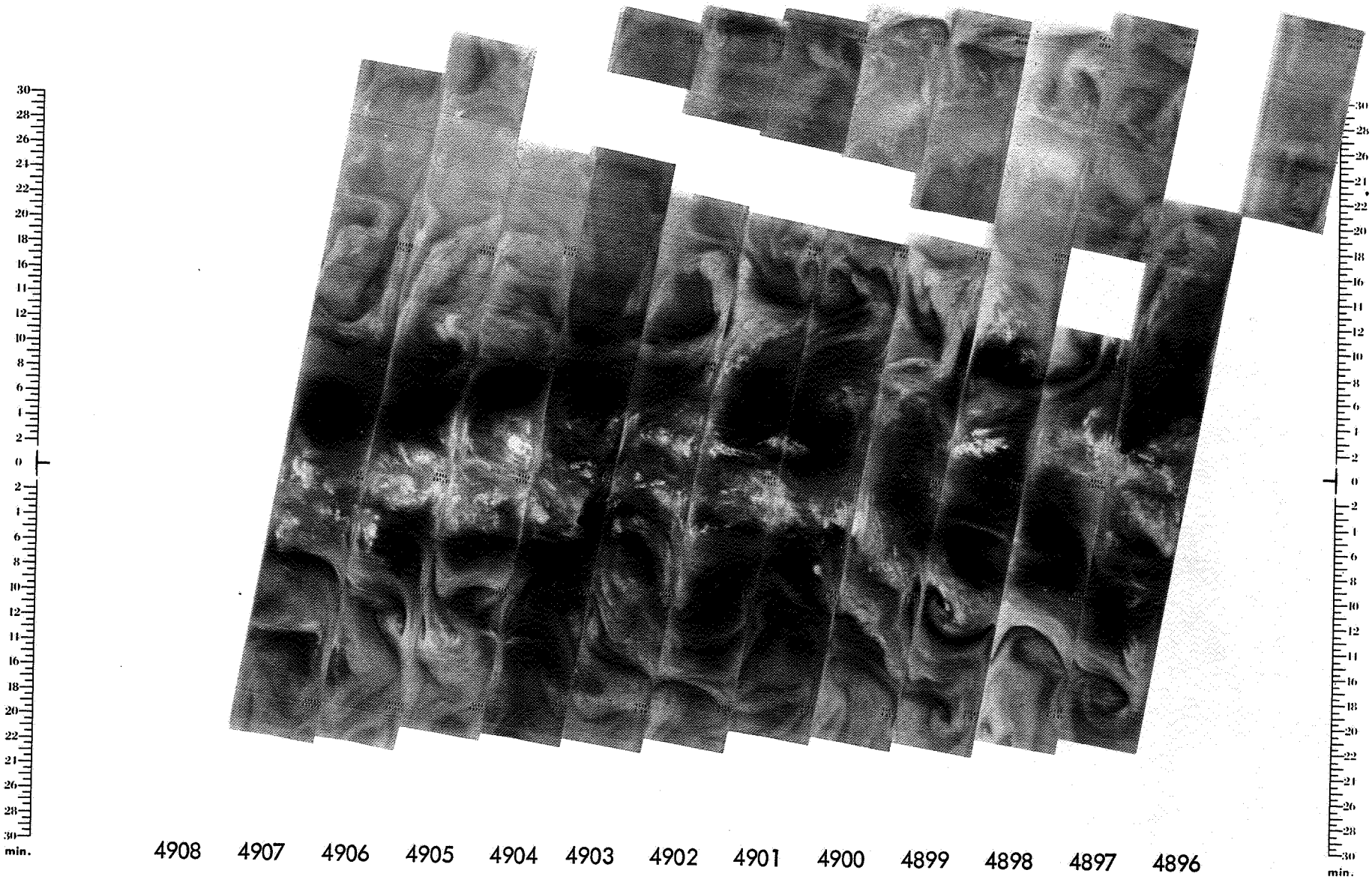
11.5 μm



10 DECEMBER 1973

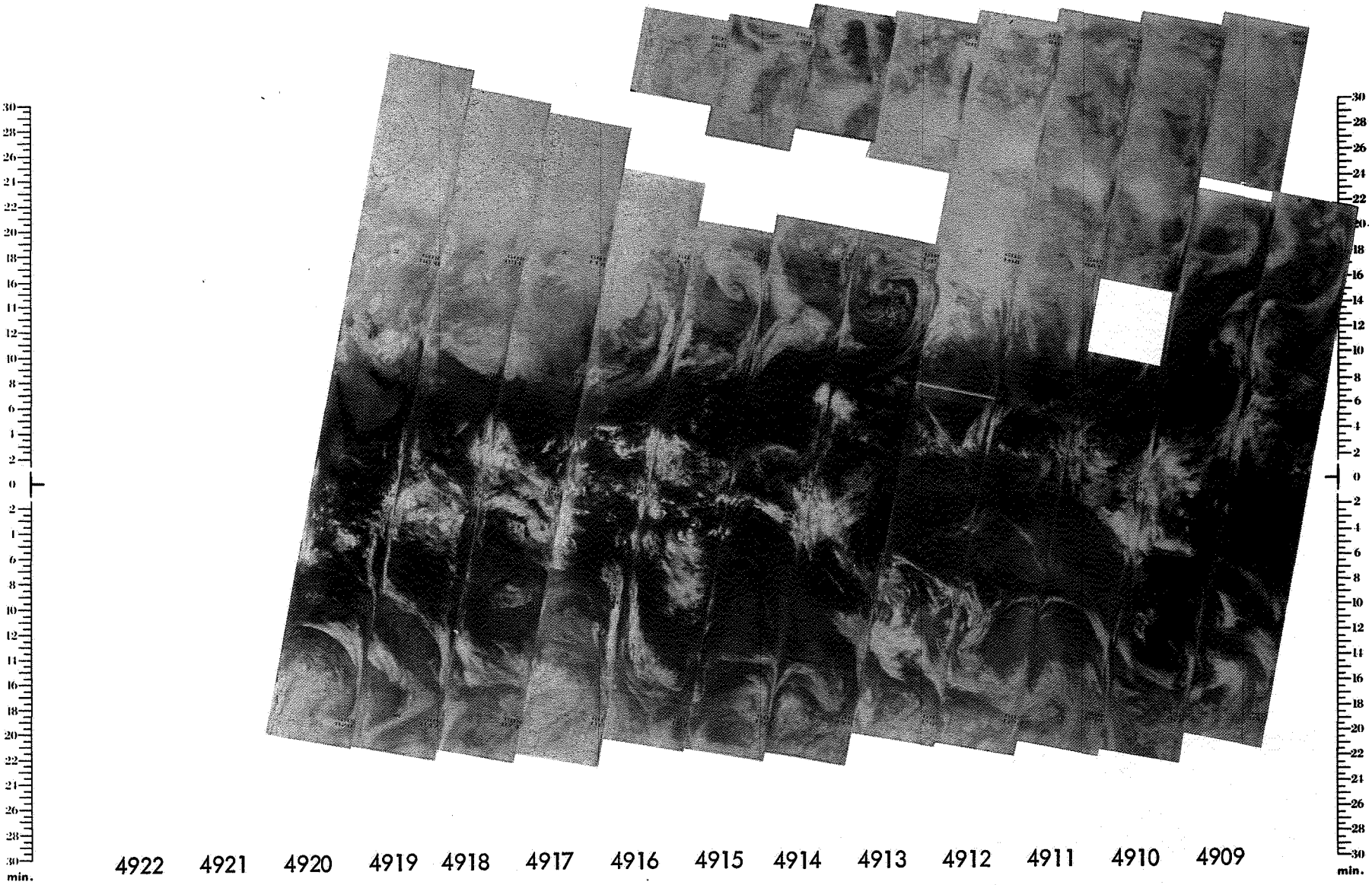
6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.
4896 4897 4898 4899 4900 4901 4902 4903 4904 4905 4906 4907 4908
11 DECEMBER 1973
11.5 μm



11 DECEMBER 1973

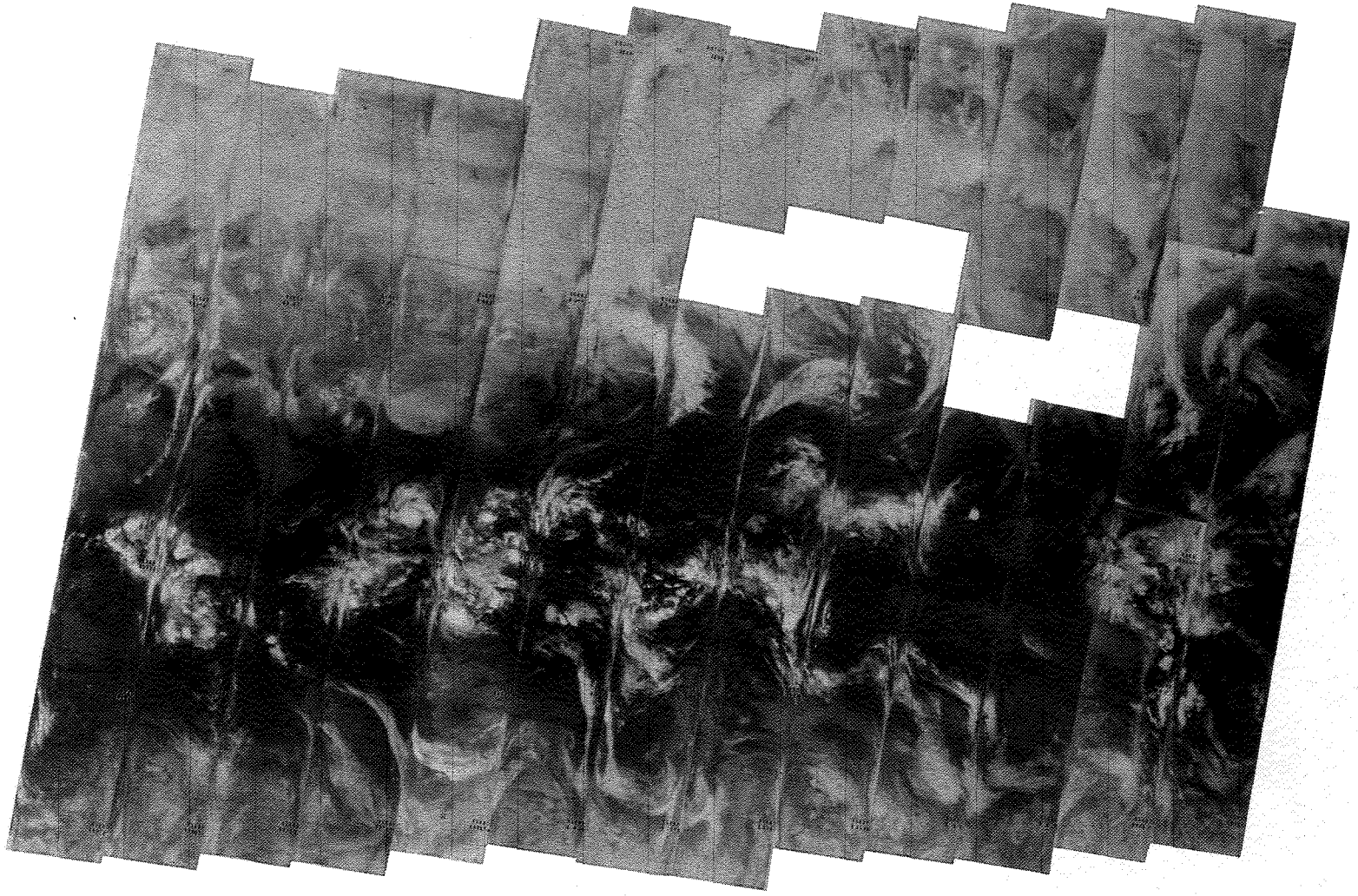
6.7 μm



12 DECEMBER 1973

11.5 μm

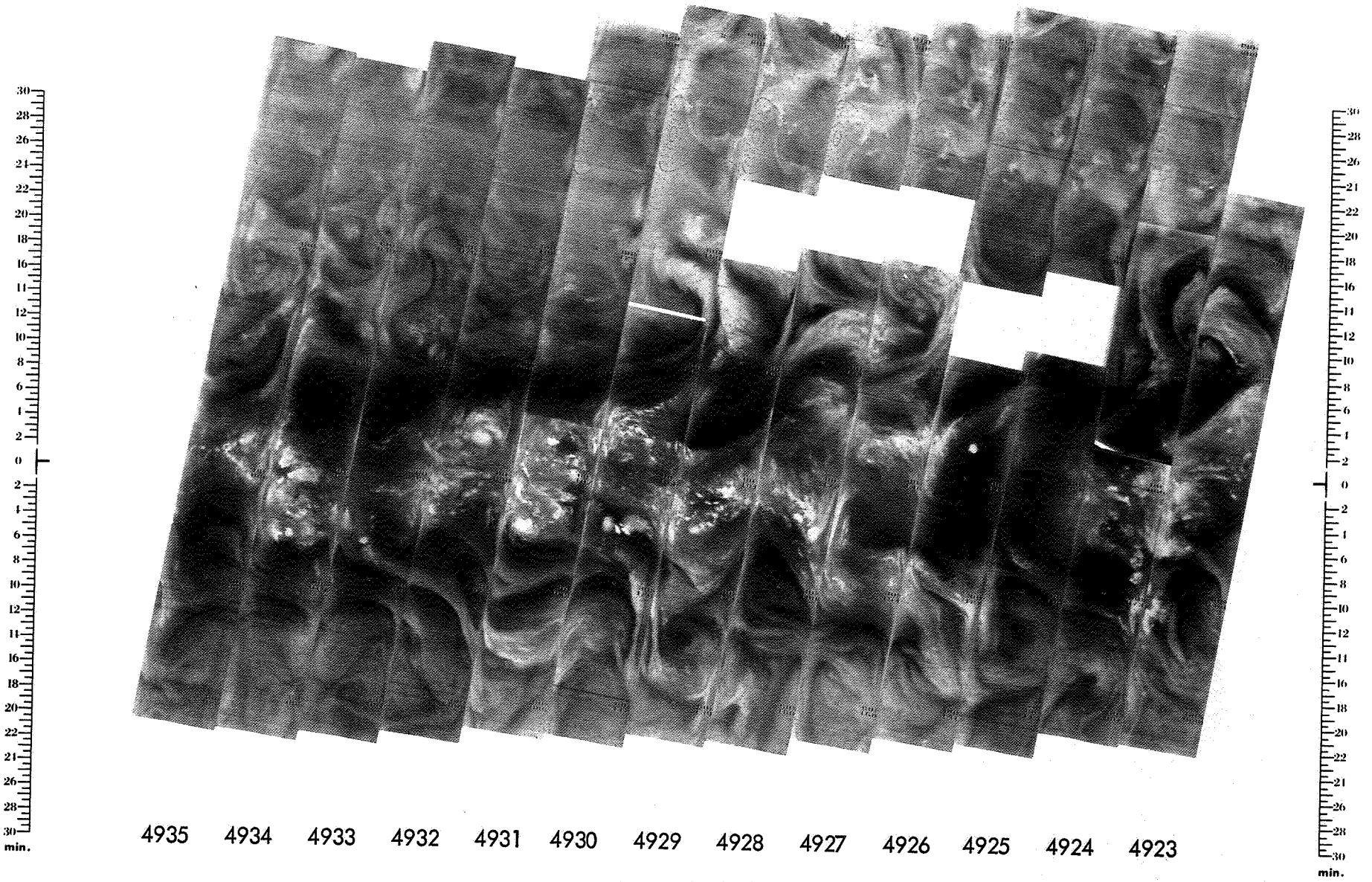
4909
4910
4911
4912
4913
4914
4915
4916
4917
4918
4919
4920
4921
4922
12 DECEMBER 1973
6.7 μm
min.



4935 4934 4933 4932 4931 4930 4929 4928 4927 4926 4925 4924 4923

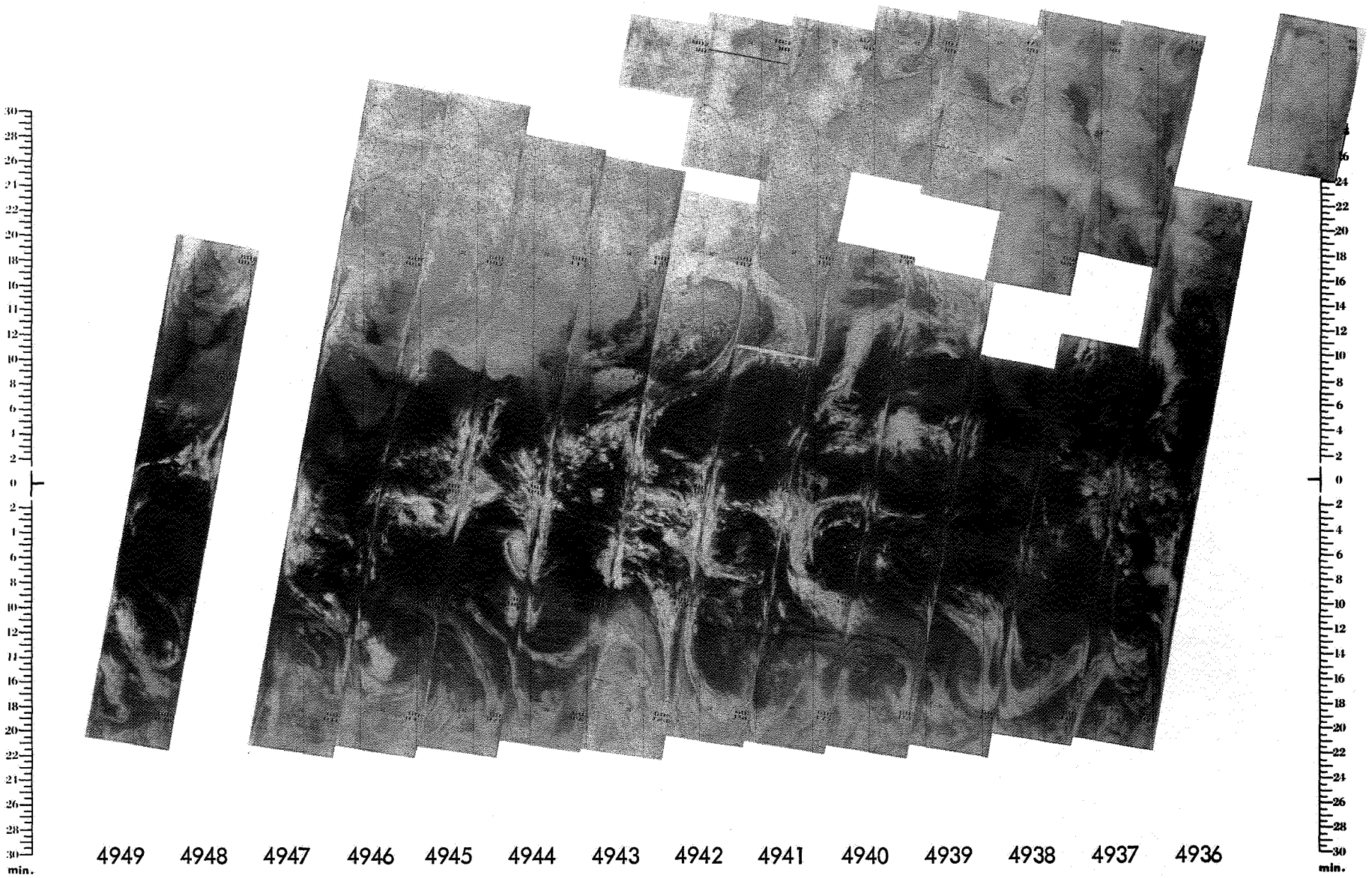
13 DECEMBER 1973

11.5 μm



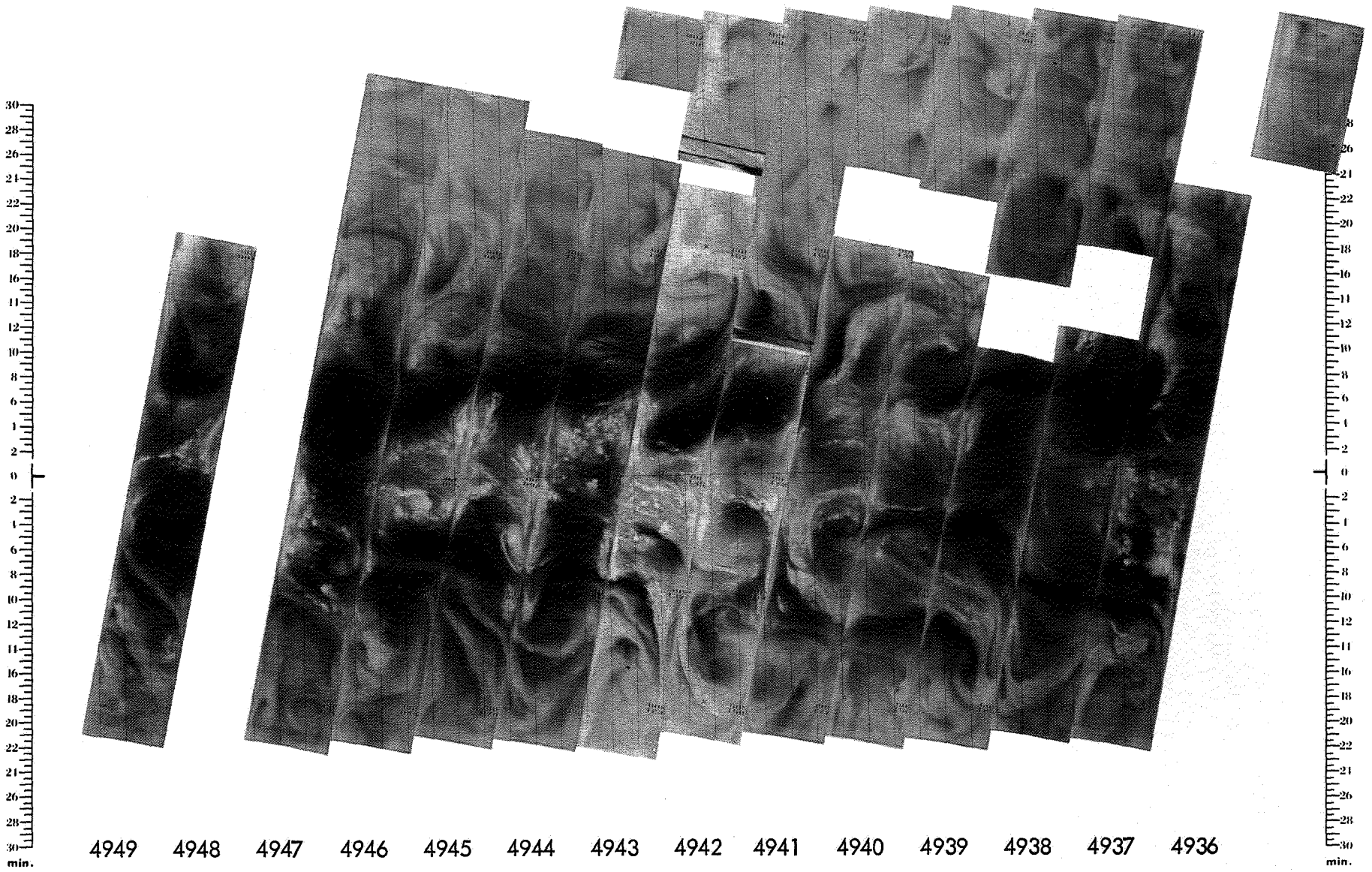
13 DECEMBER 1973

6.7 μm



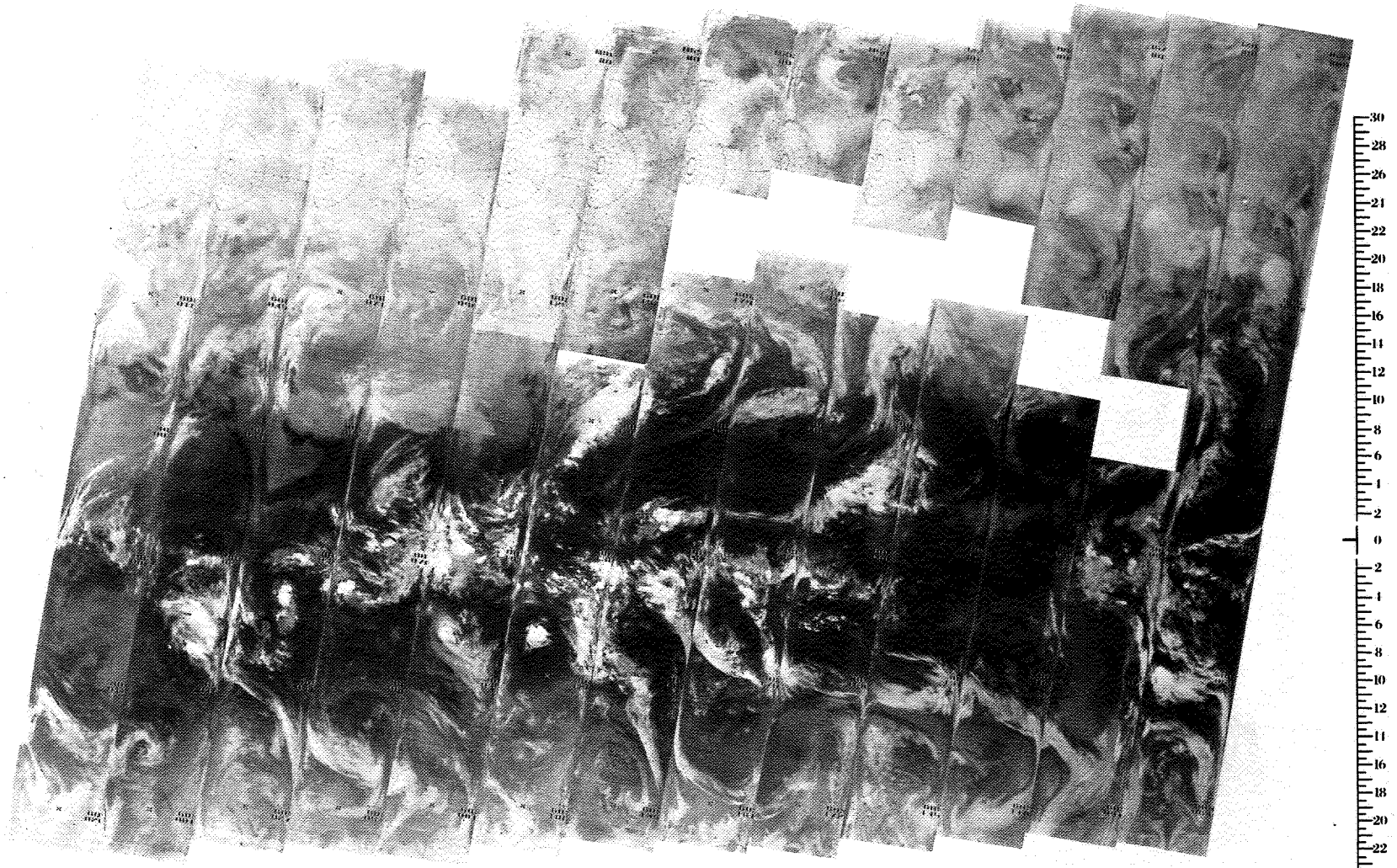
14 DECEMBER 1973

11.5 μm



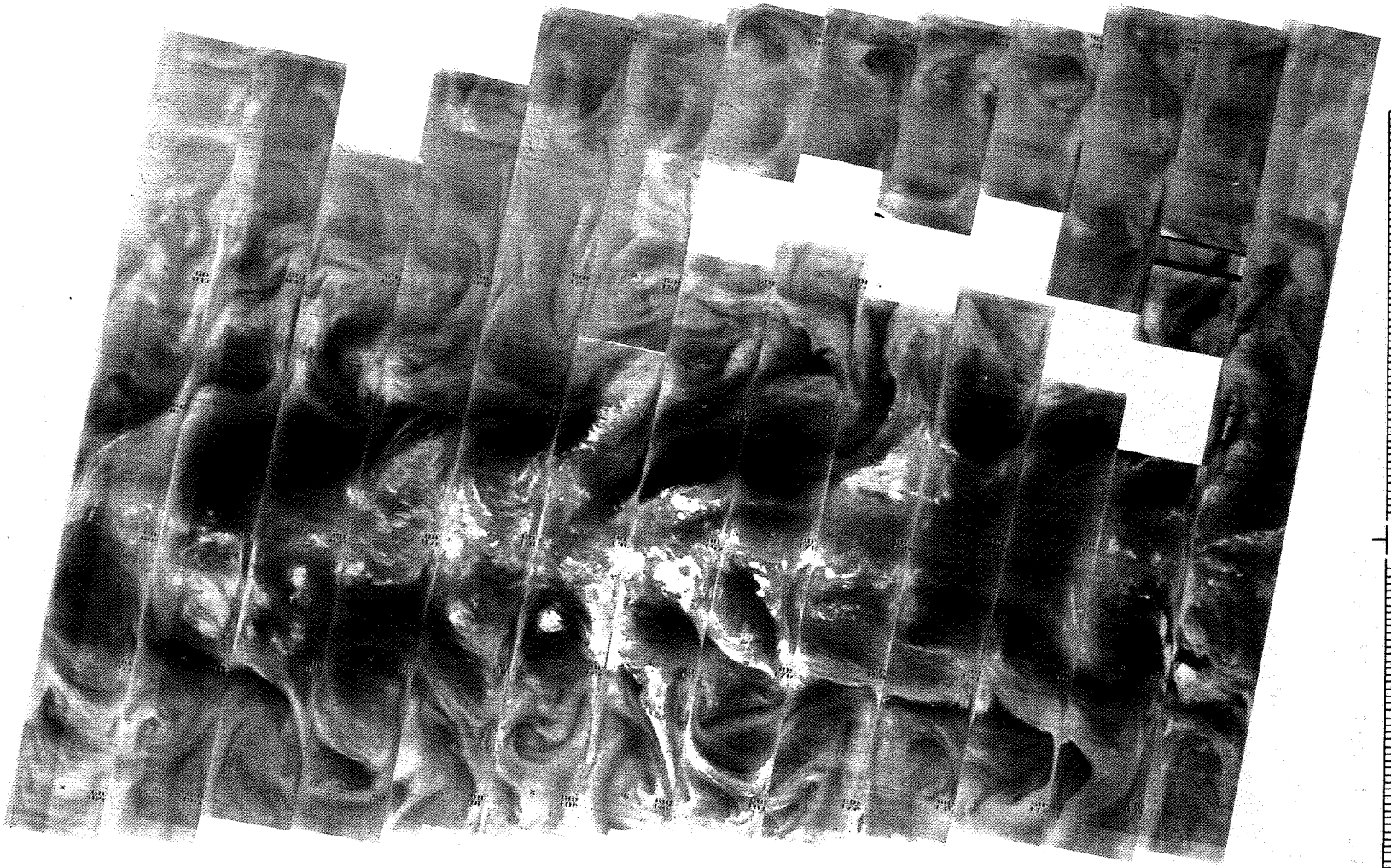
14 DECEMBER 1973

6.7 μm



15 DECEMBER 1973

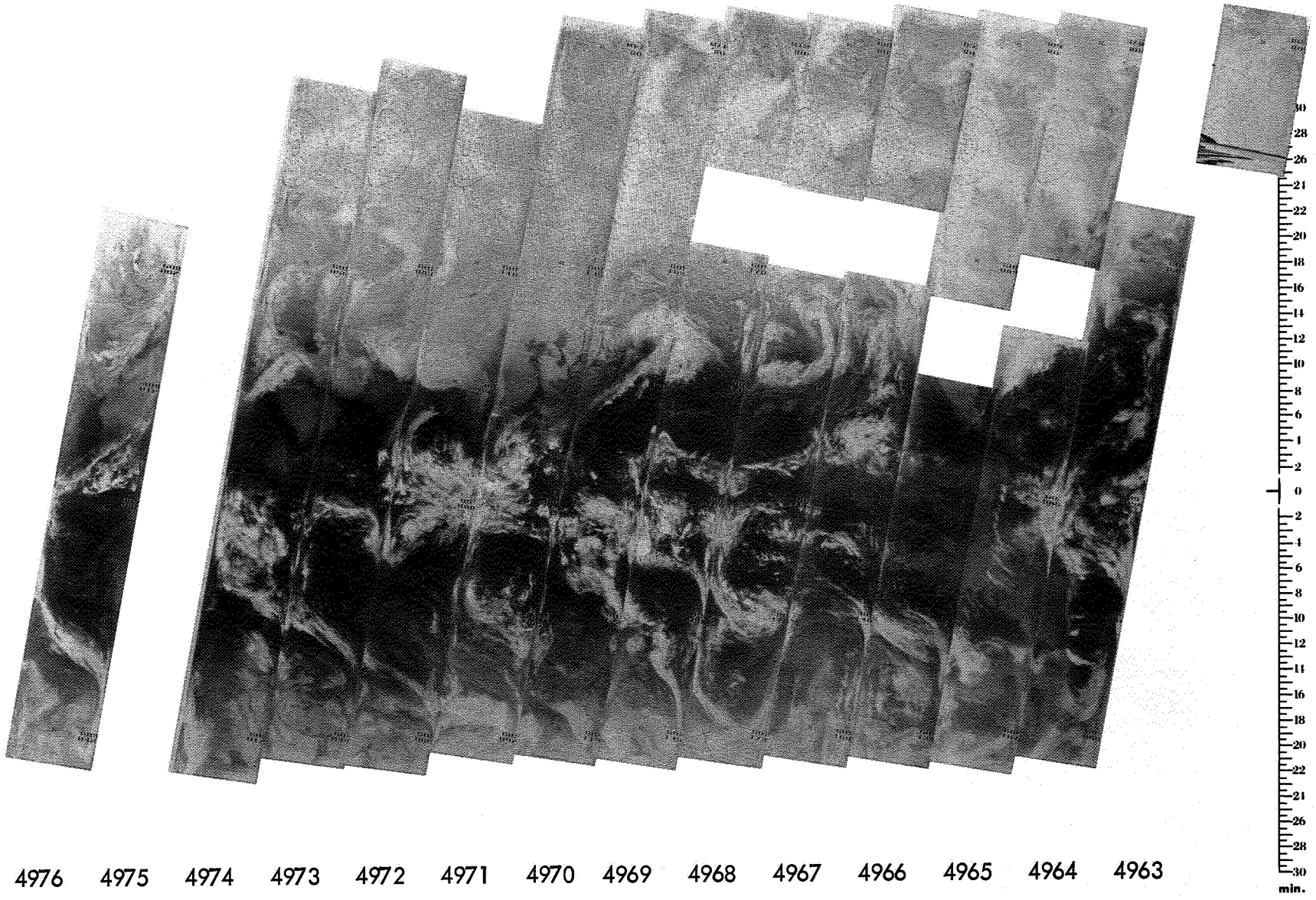
11.5 μm



4962 4961 4960 4959 4958 4957 4956 4955 4954 4953 4952 4951 4950

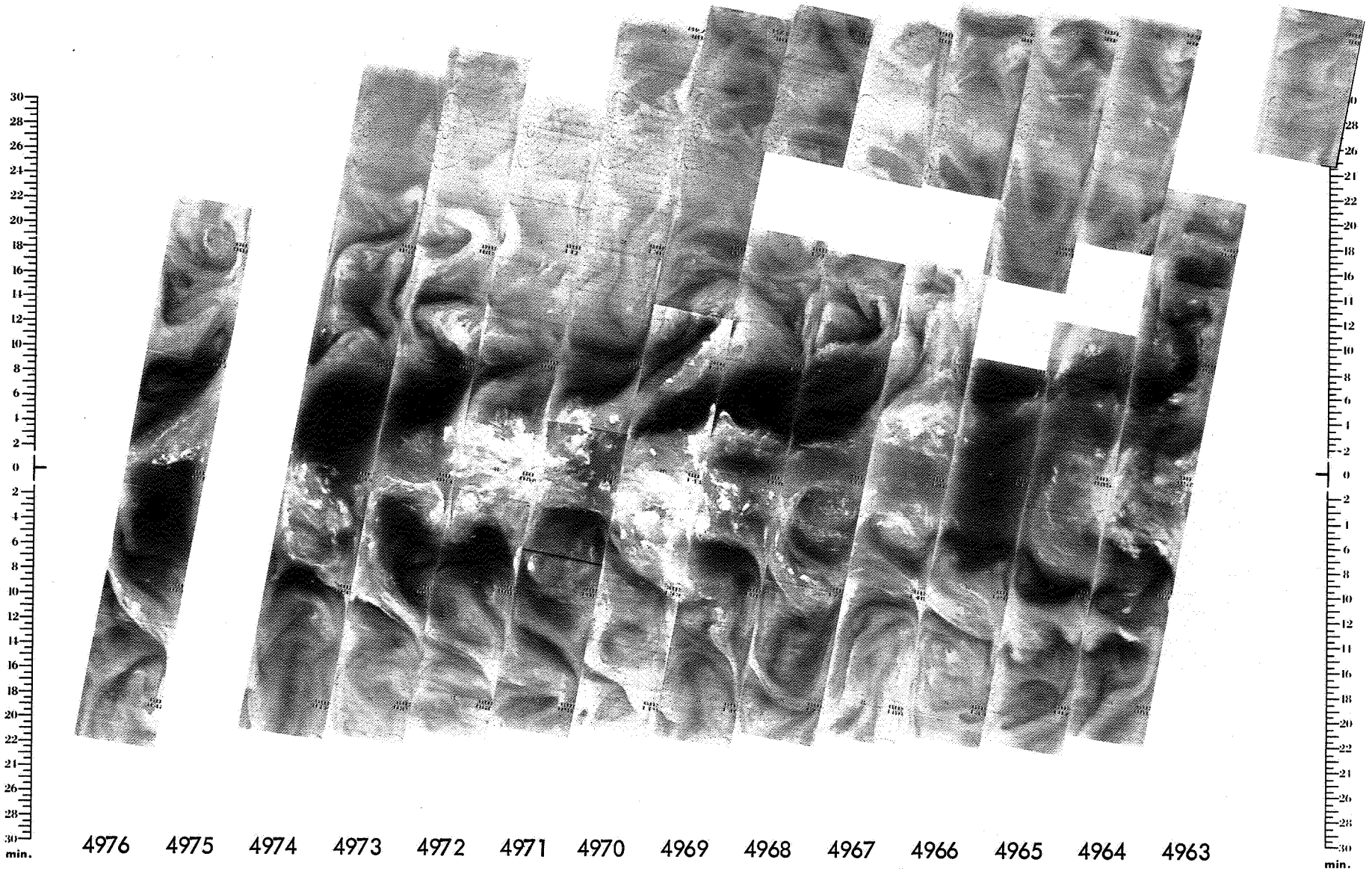
15 DECEMBER 1973

6.7 μm



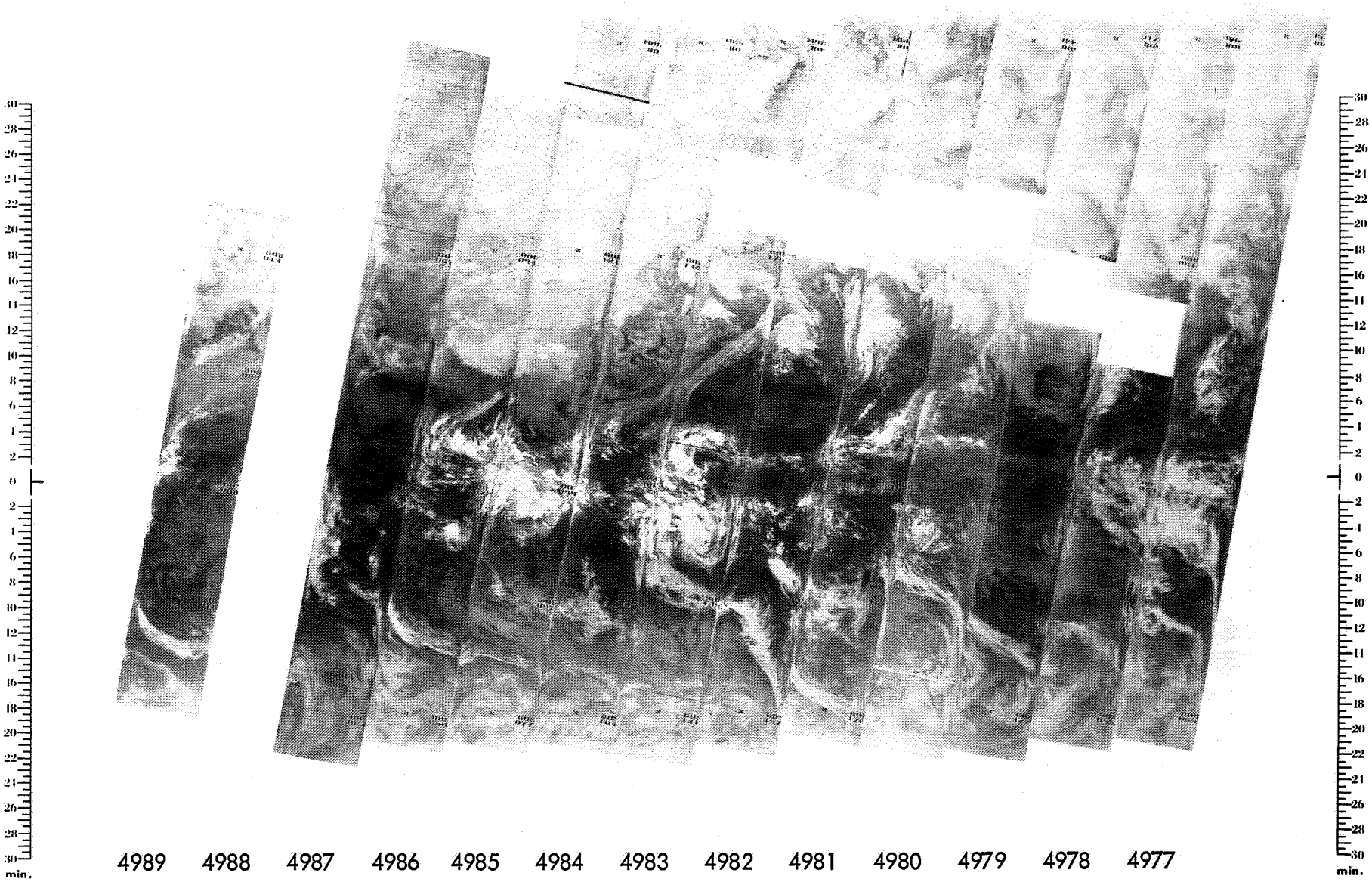
16 DECEMBER 1973

11.5 μm



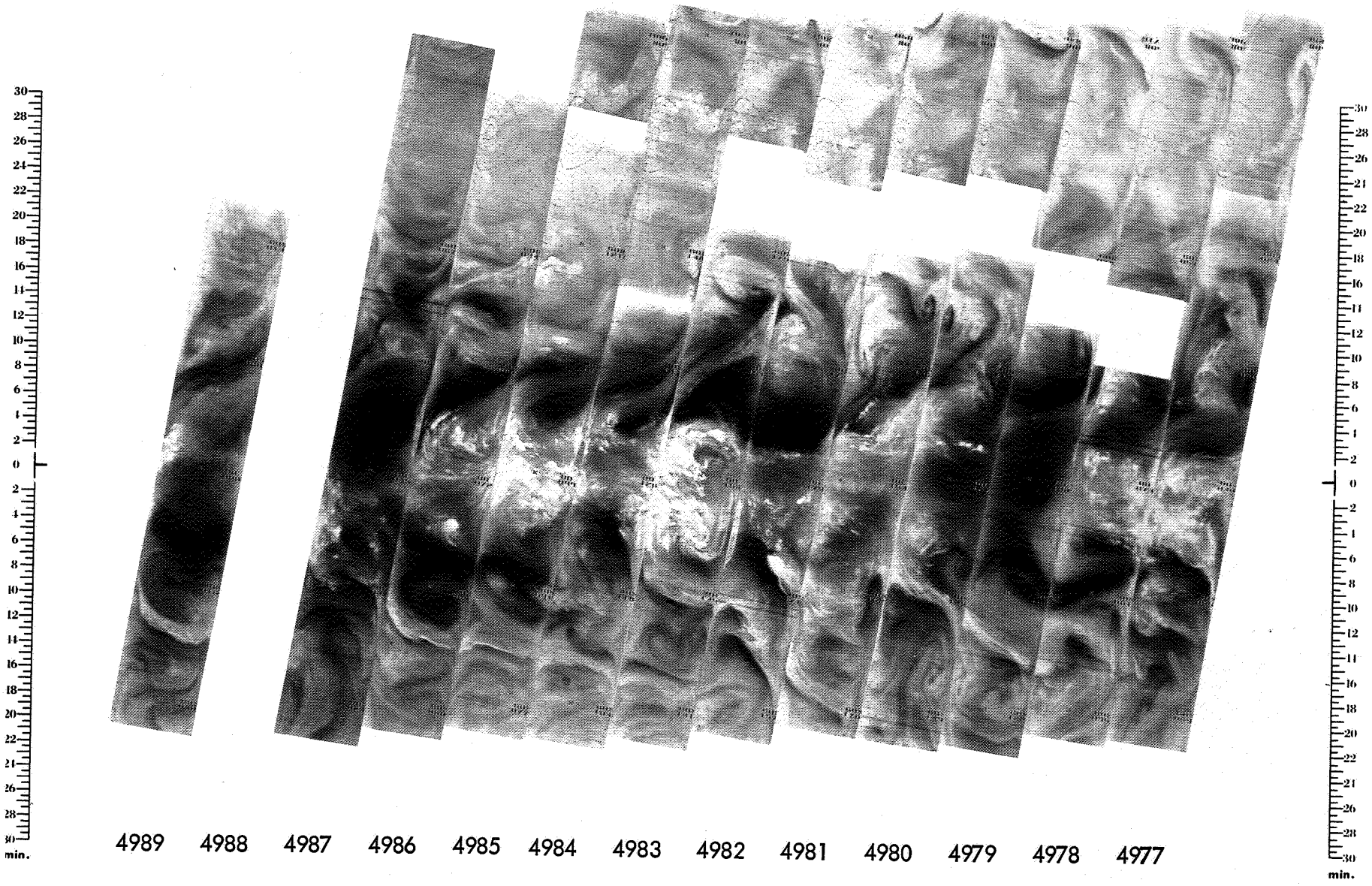
16 DECEMBER 1973

6.7 μm



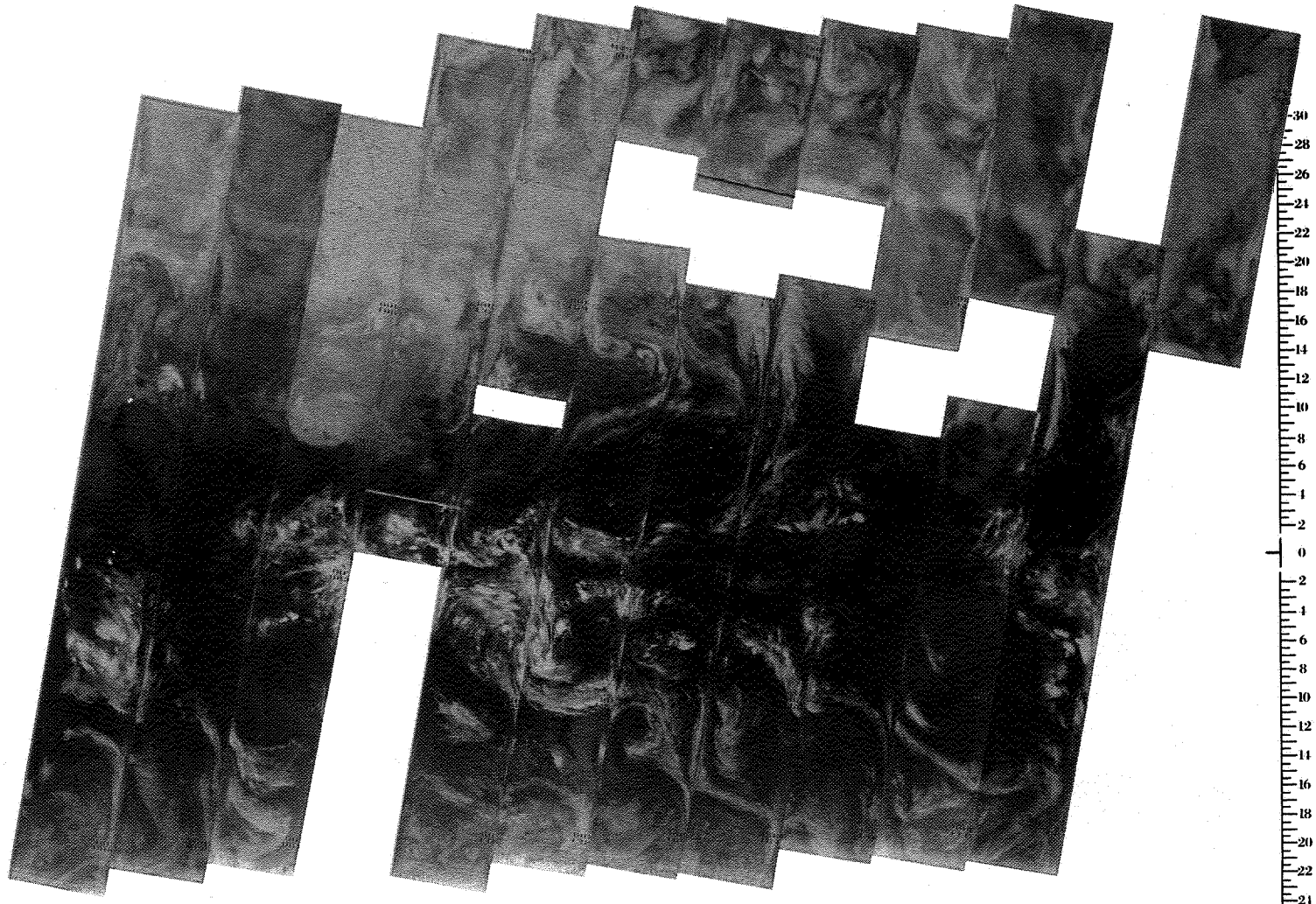
17 DECEMBER 1973

11.5 μm



17 DECEMBER 1973

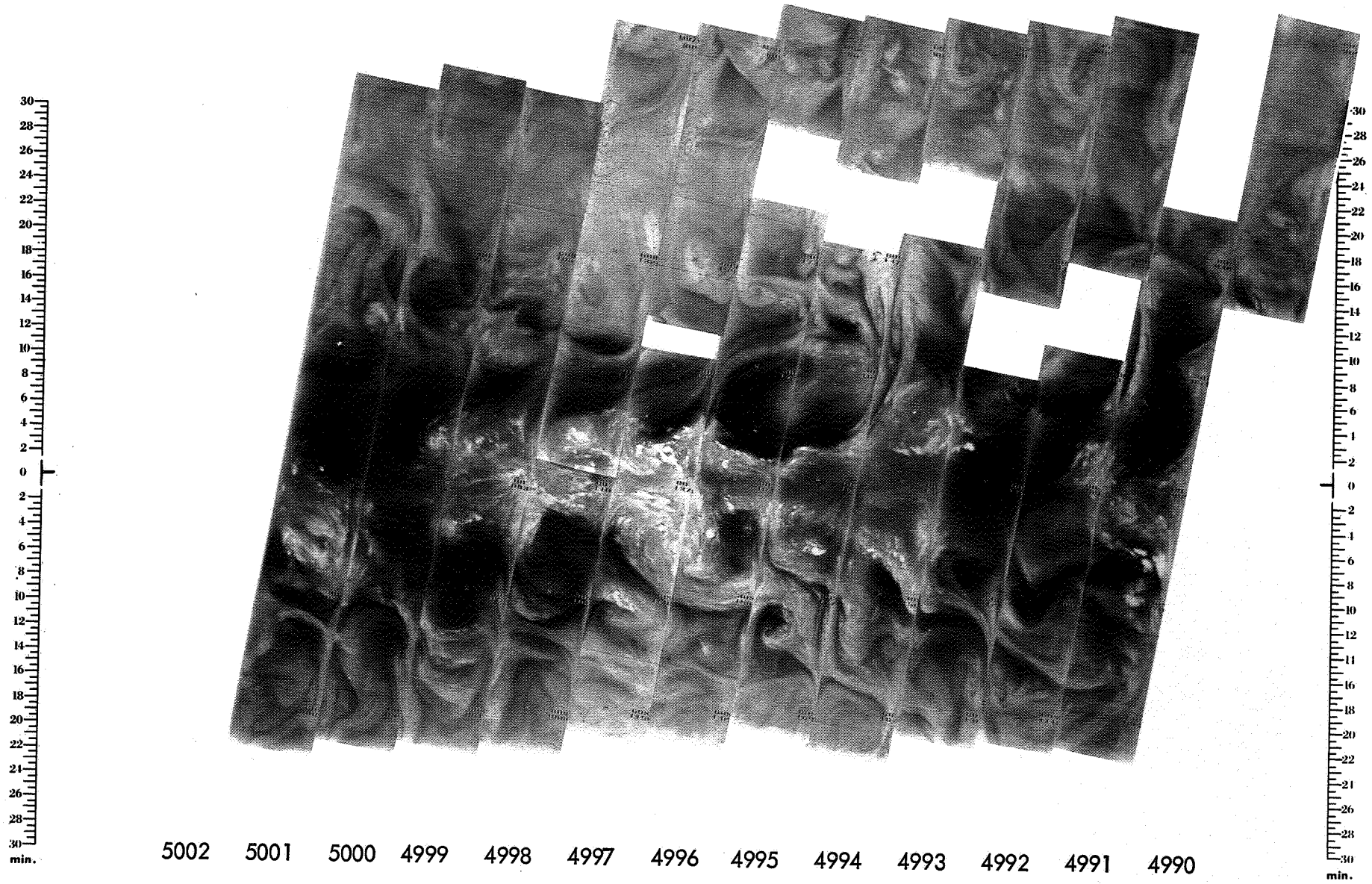
6.7 μm



5002 5001 5000 4999 4998 4997 4996 4995 4994 4993 4992 4991 4990

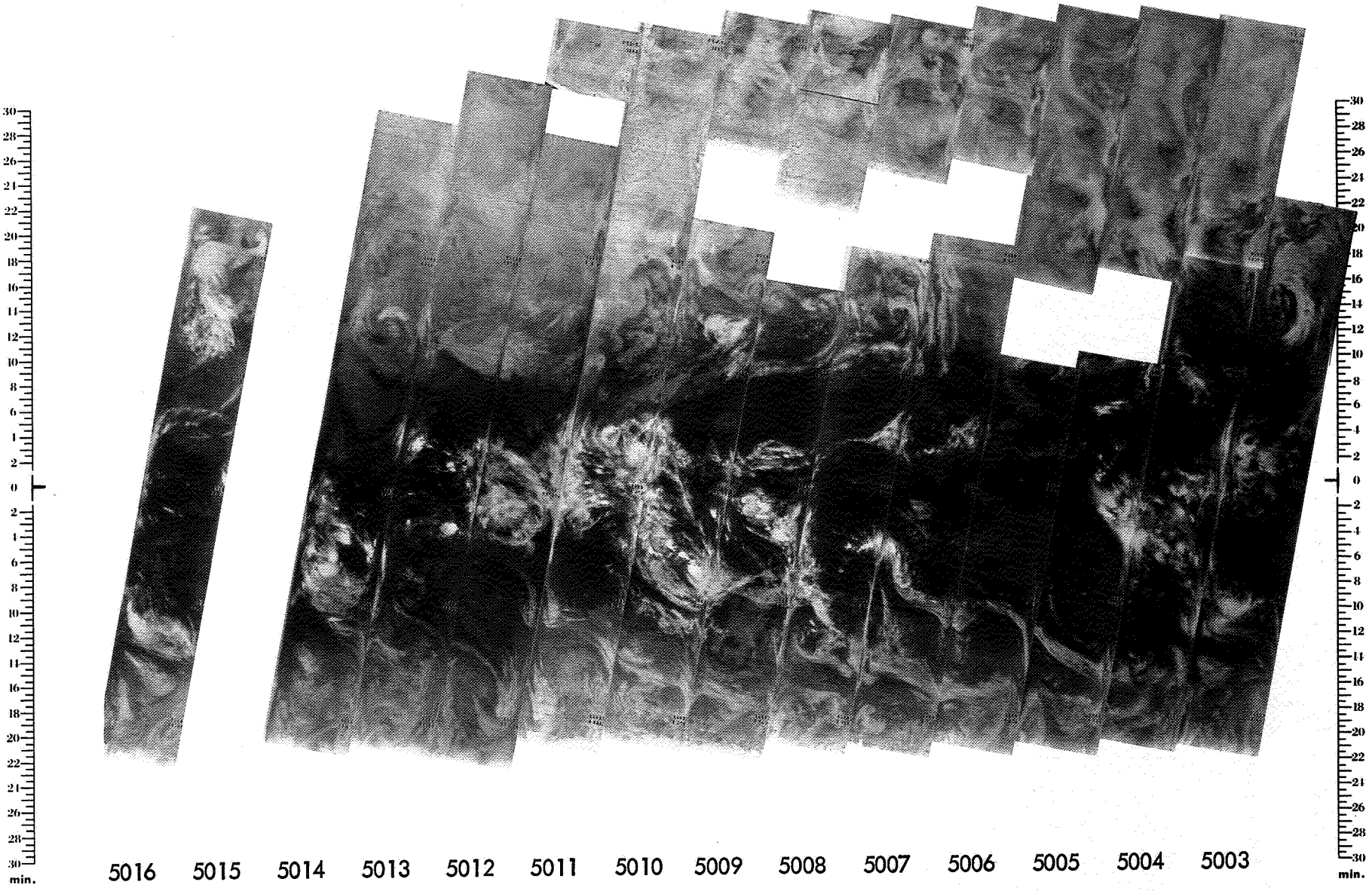
18 DECEMBER 1973

11.5 μm



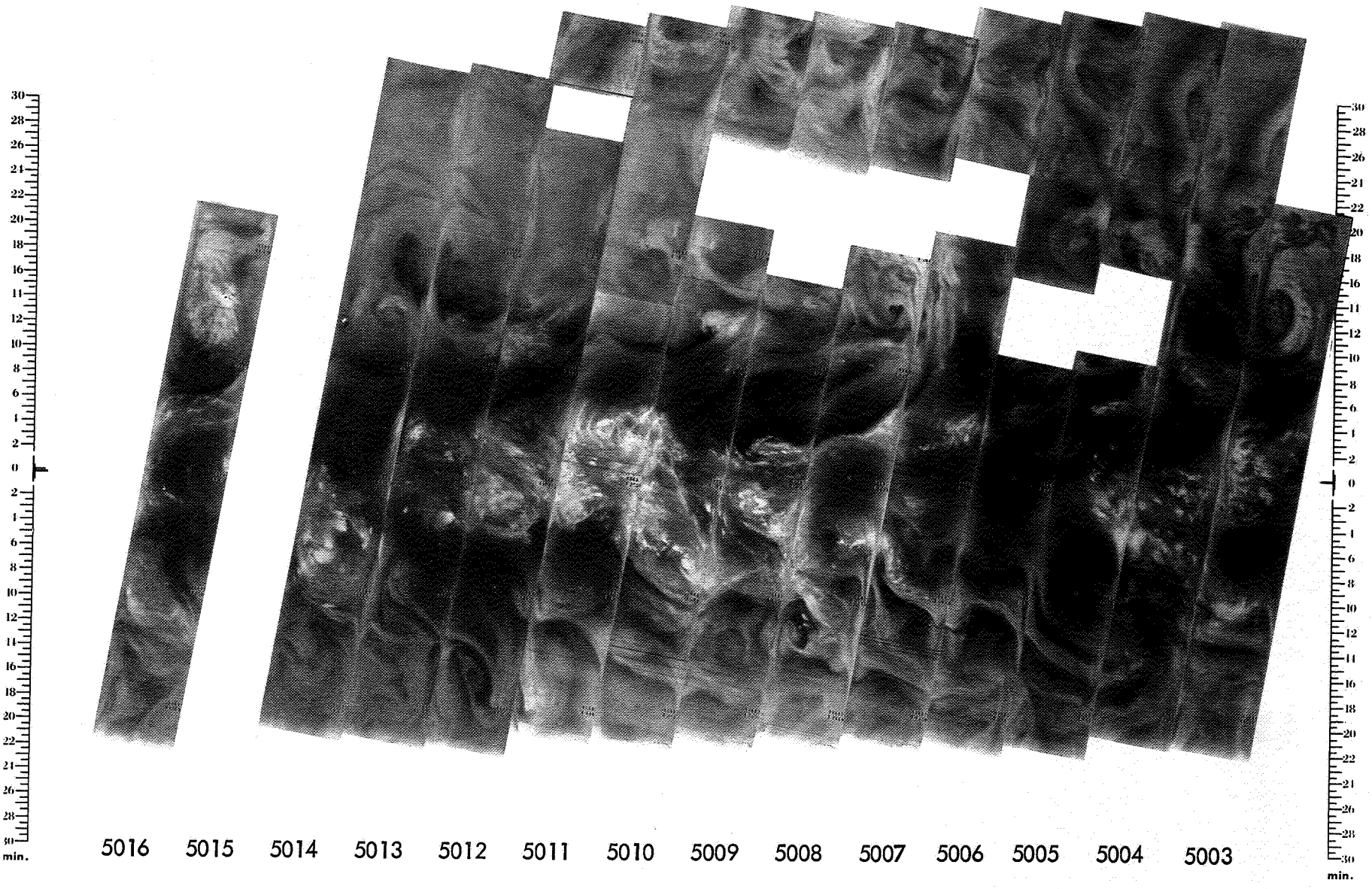
18 DECEMBER 1973

6.7 μm



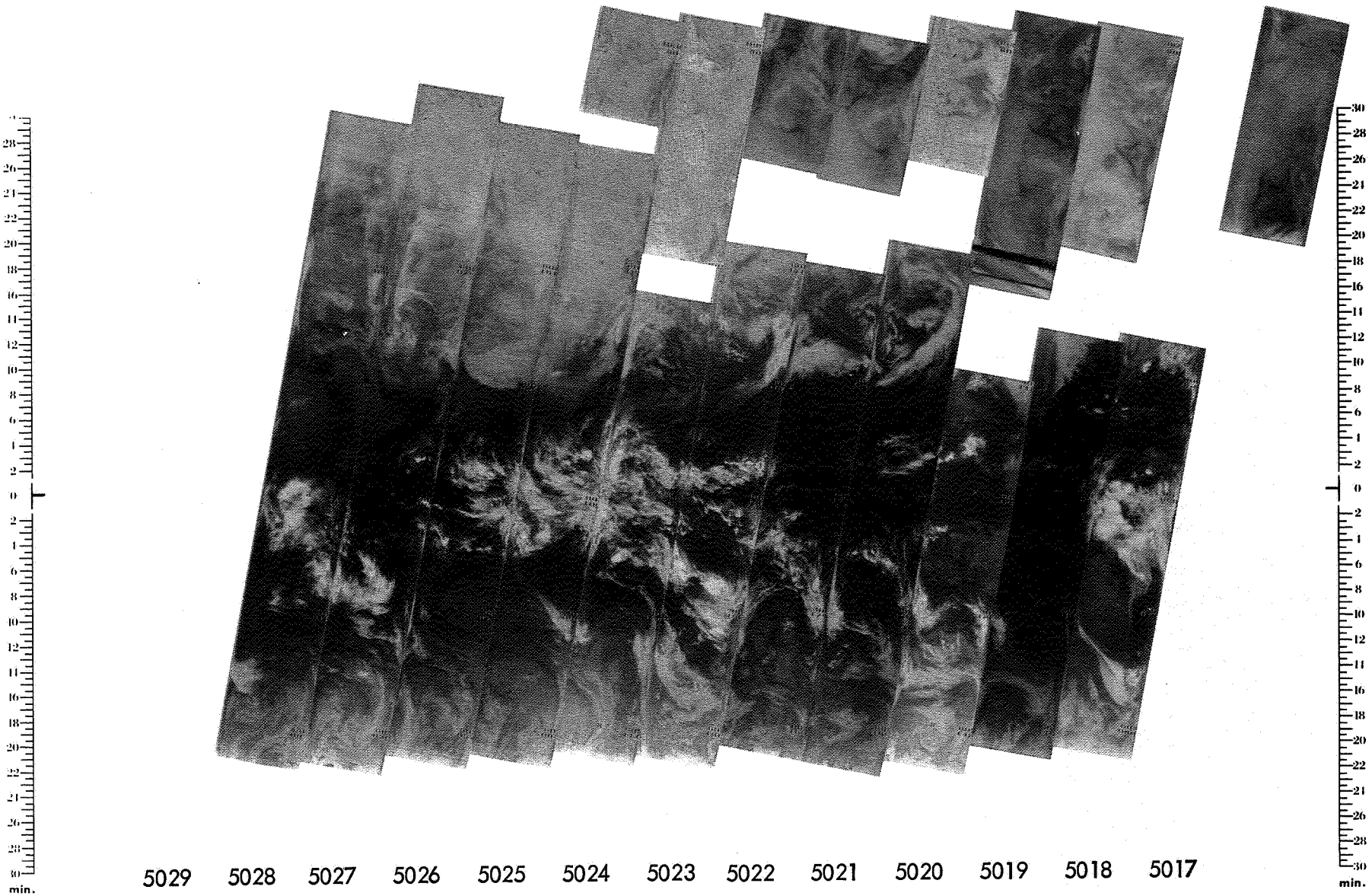
19 DECEMBER 1973

11.5 μm



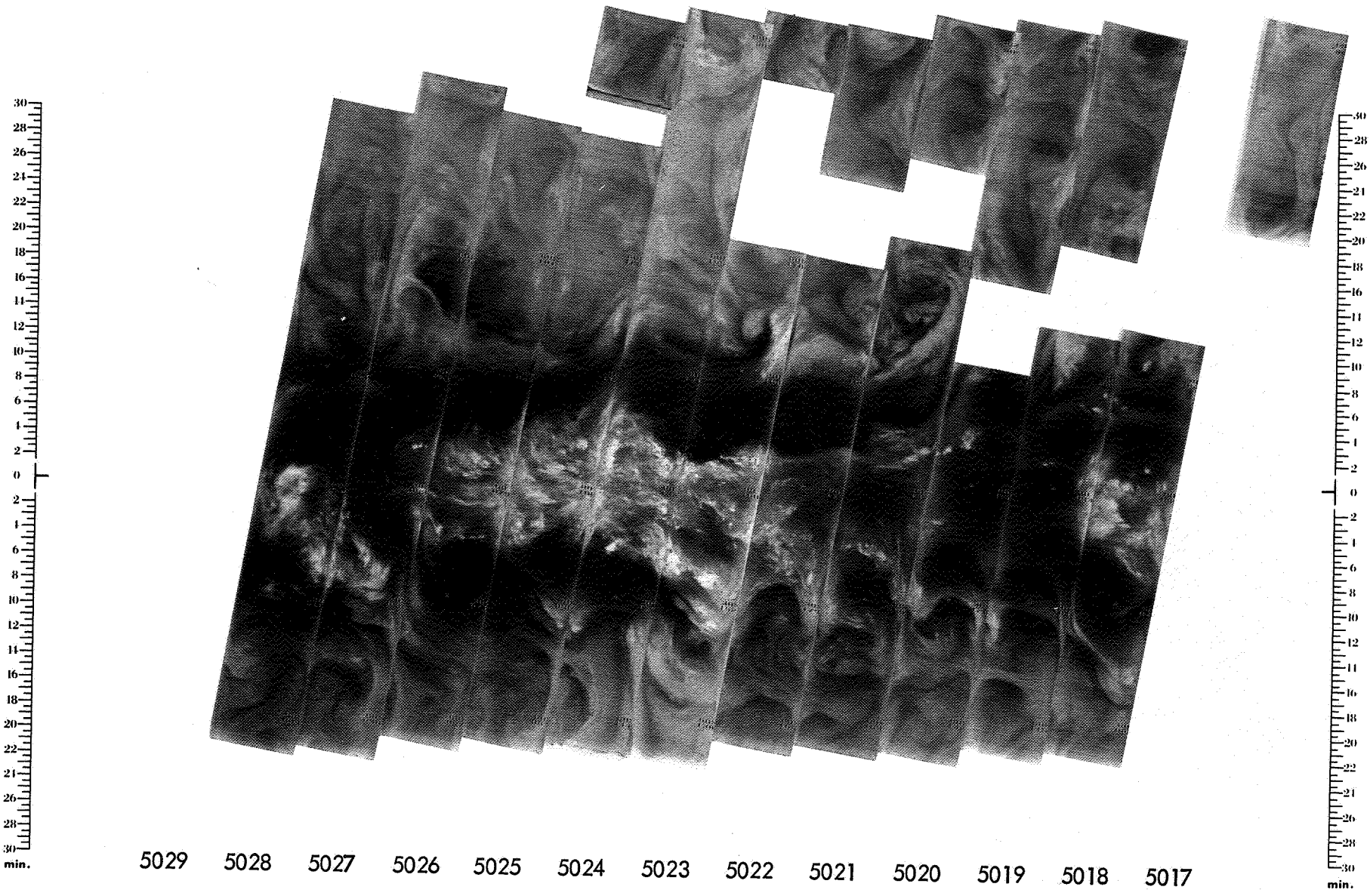
19 DECEMBER 1973

6.7 μm



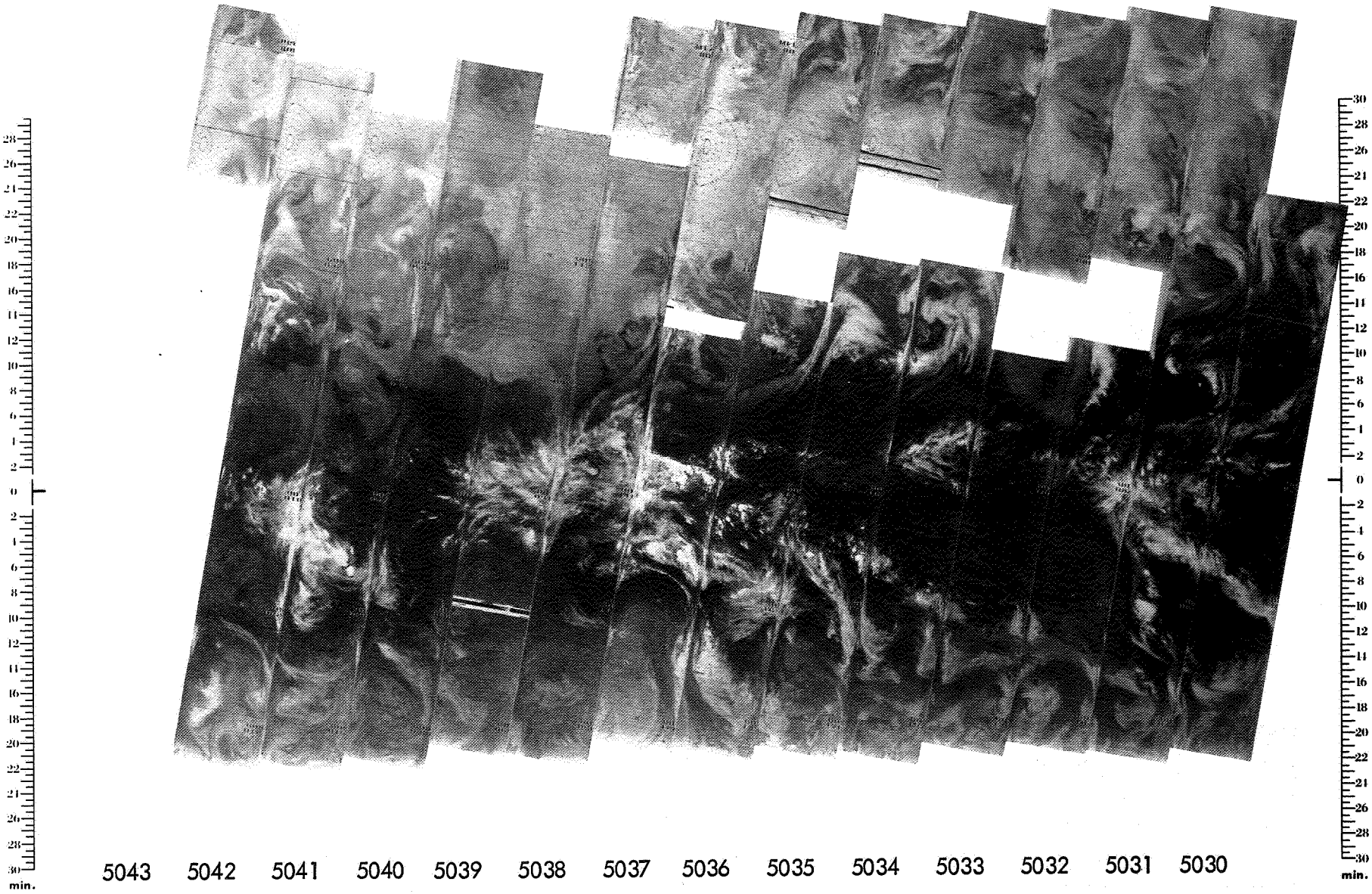
20 DECEMBER 1973

11.5 μm



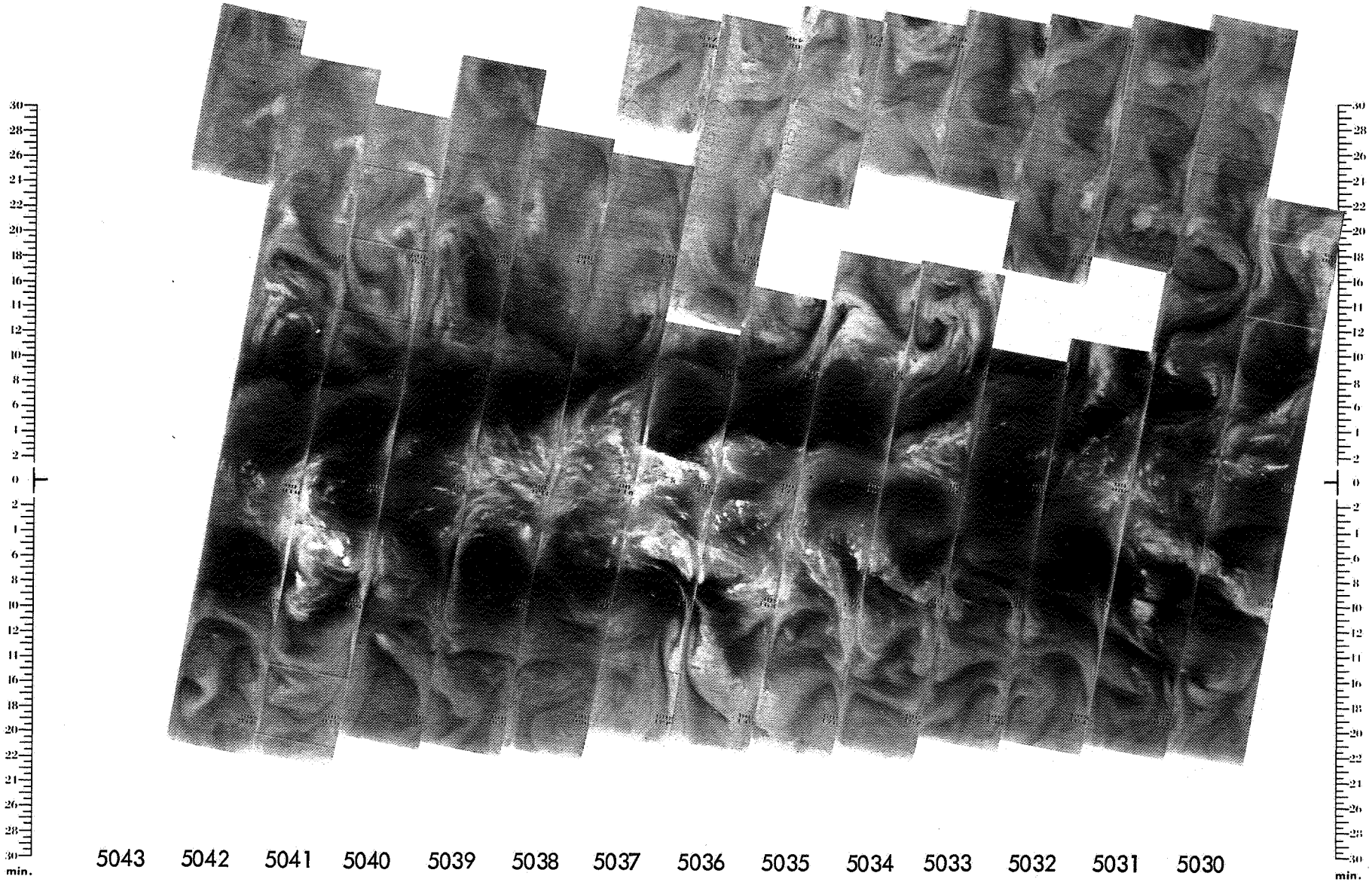
20 DECEMBER 1973

6.7 μm



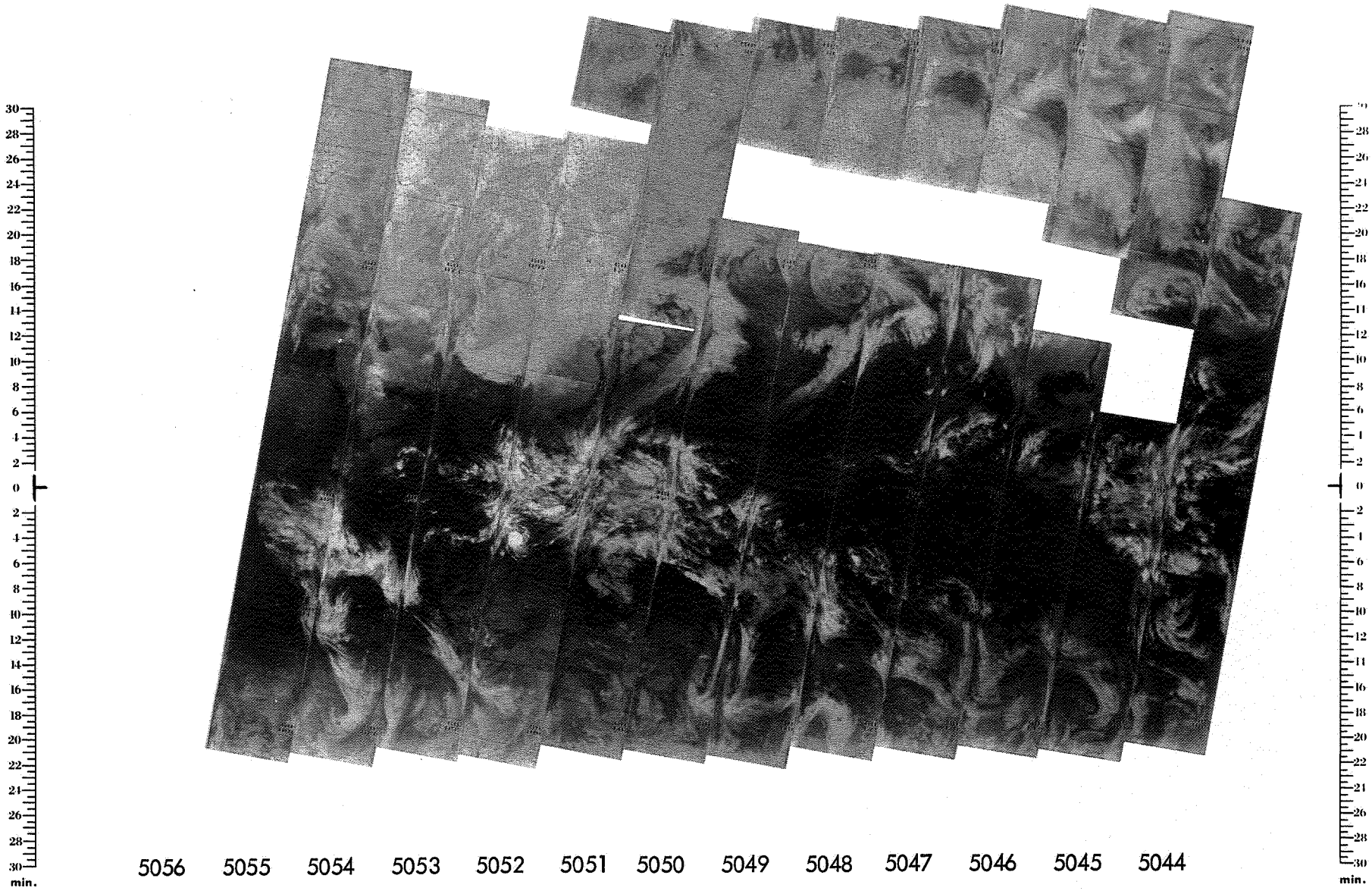
21 DECEMBER 1973

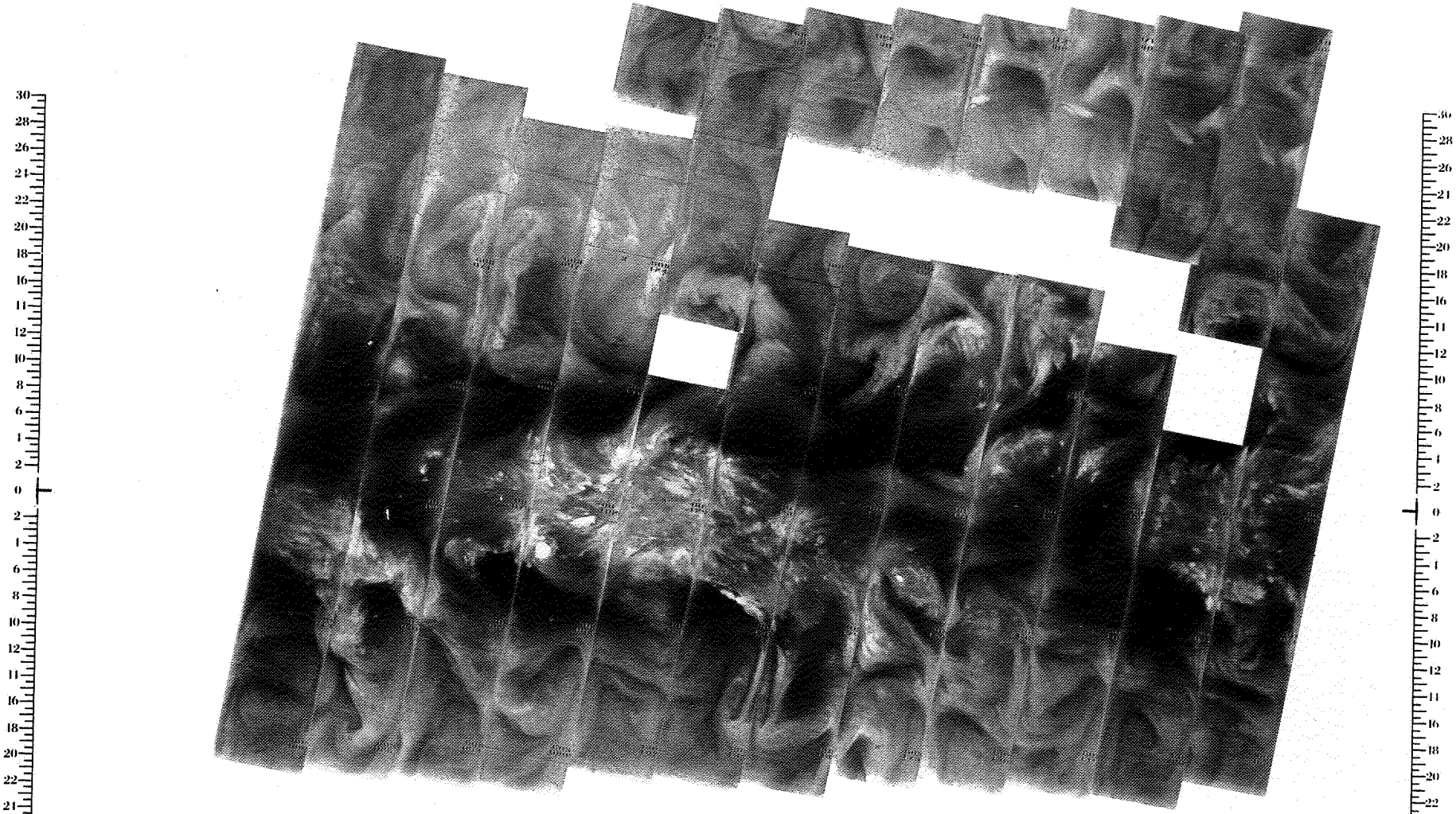
11.5 μm



21 DECEMBER 1973

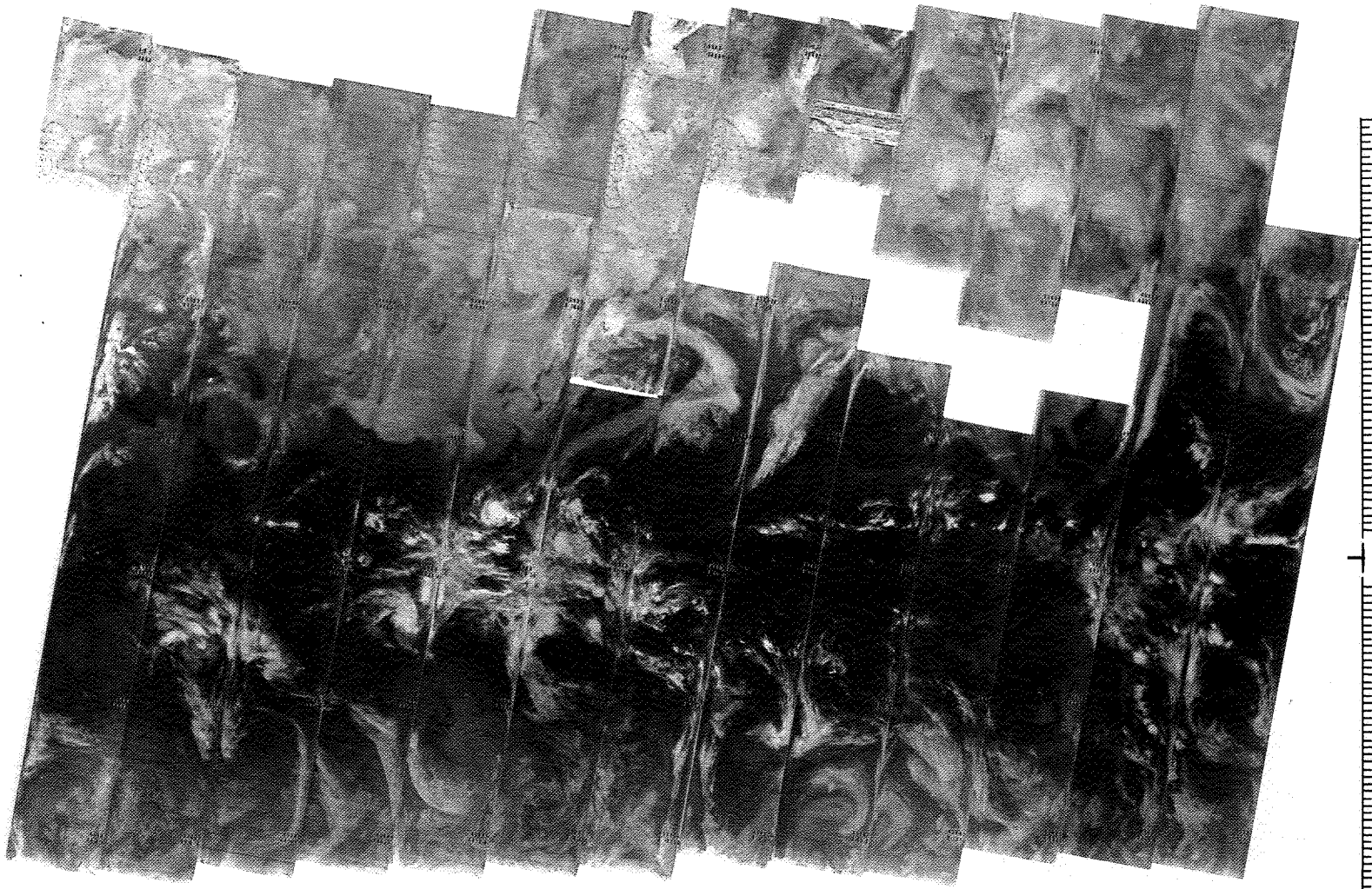
6.7 μm


5056 5055 5054 5053 5052 5051 5050 5049 5048 5047 5046 5045 5044
22 DECEMBER 1973
11.5 μm
min.
min.



22 DECEMBER 1973

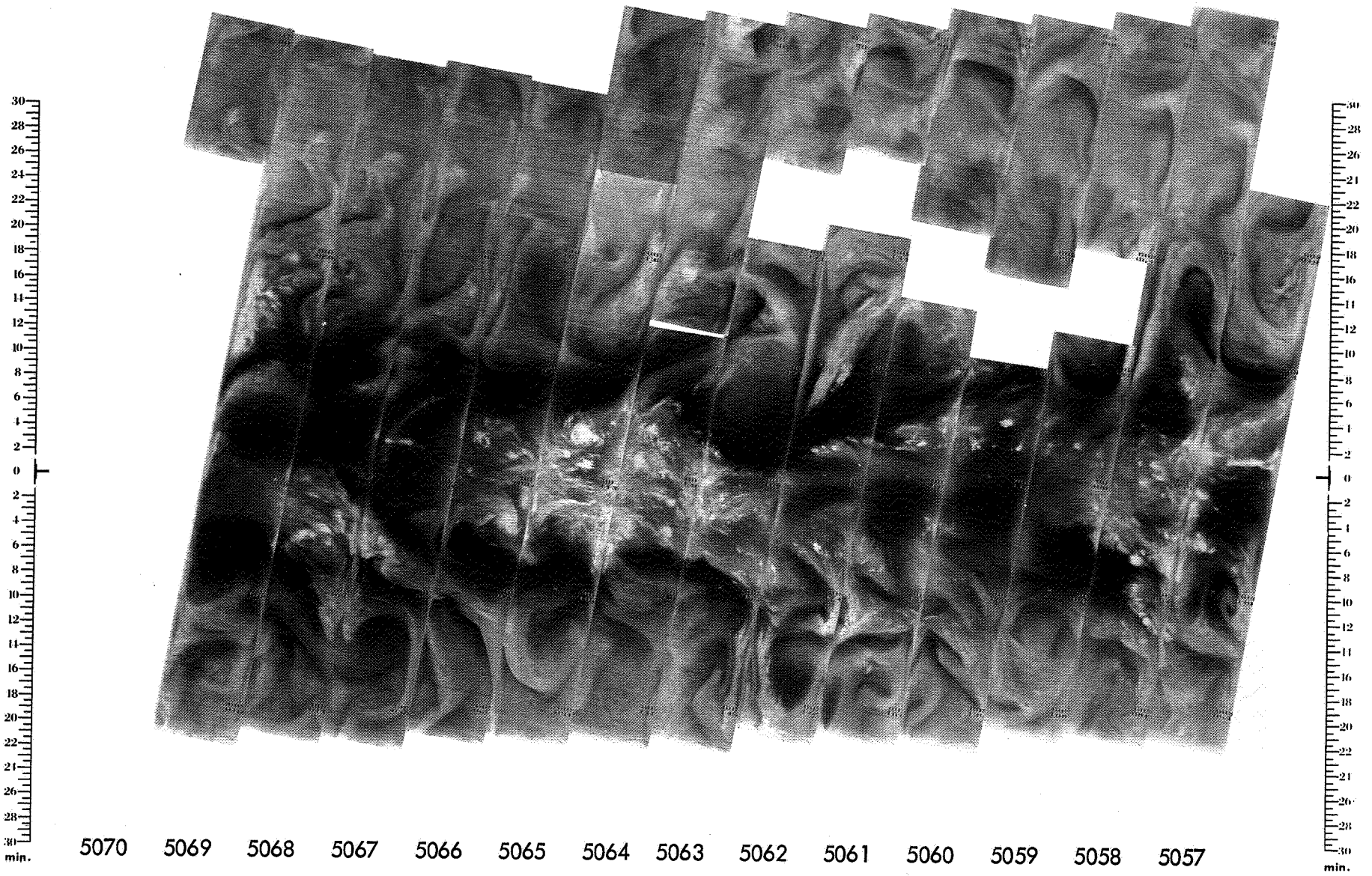
6.7 μm



5070 5069 5068 5067 5066 5065 5064 5063 5062 5061 5060 5059 5058 5057

23 DECEMBER 1973

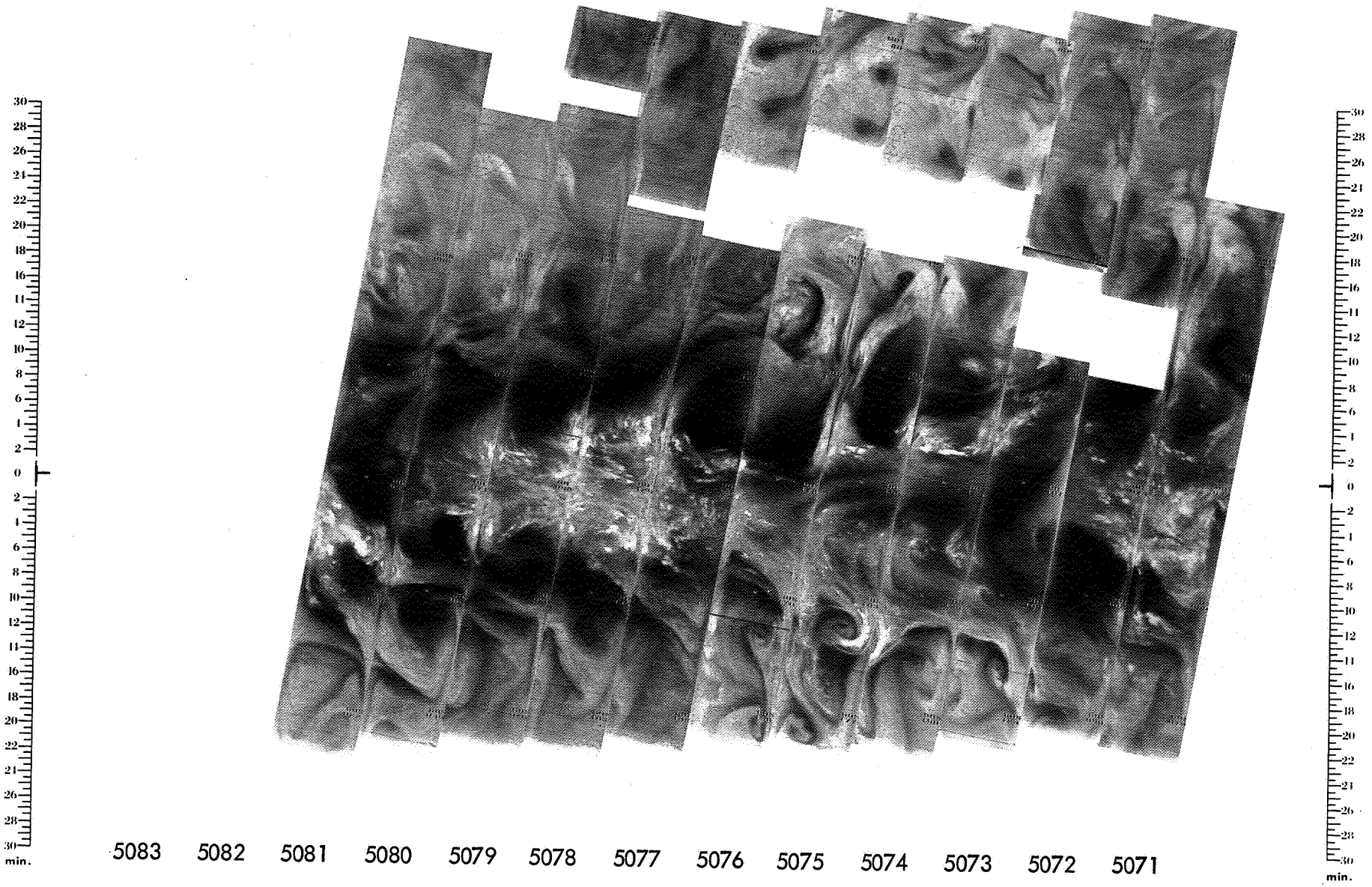
11.5 μm



23 DECEMBER 1973

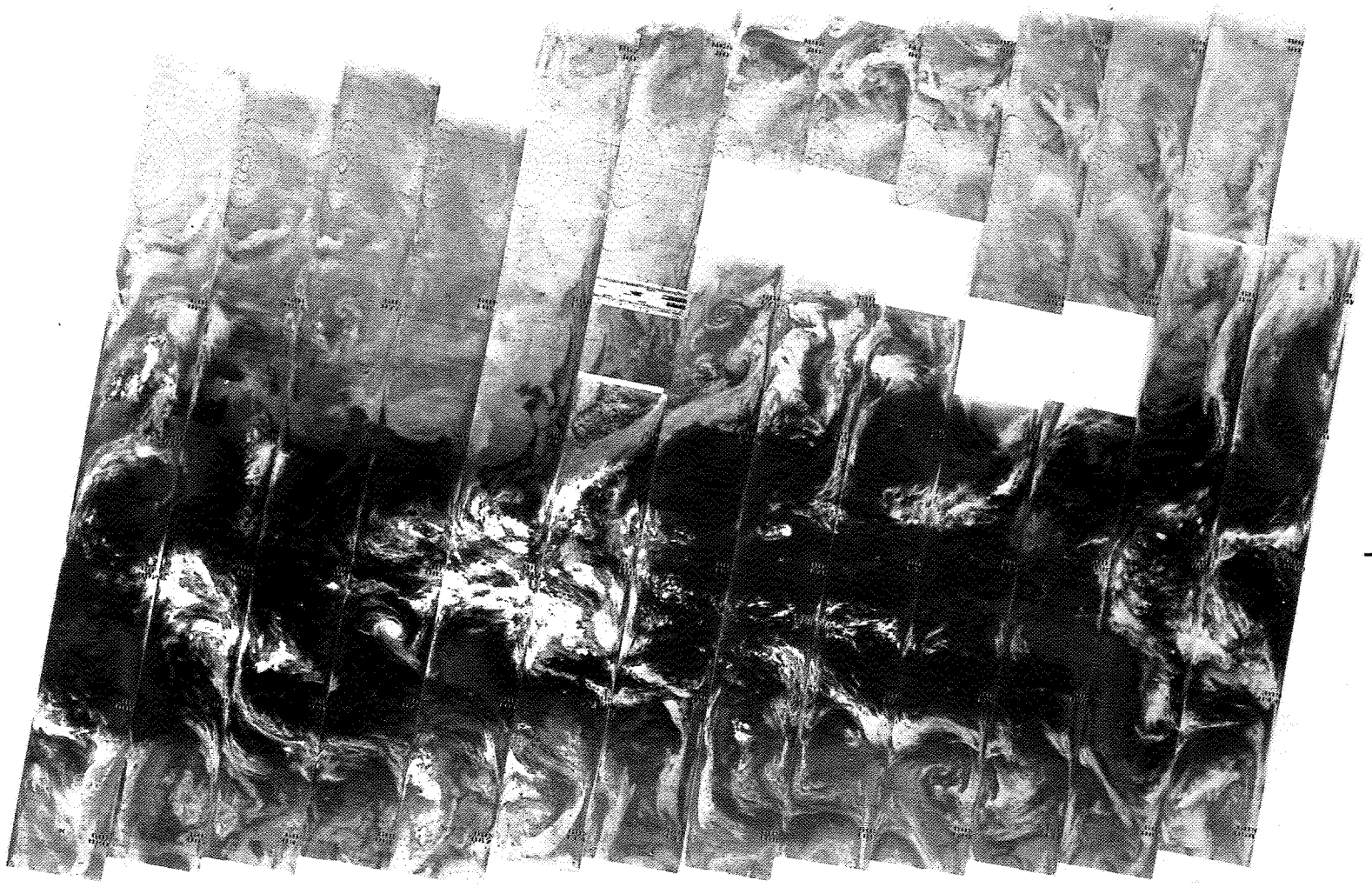
6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.
5083 5082 5081 5080 5079 5078 5077 5076 5075 5074 5073 5072 5071
24 DECEMBER 1973
11.5 μm
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.



24 DECEMBER 1973

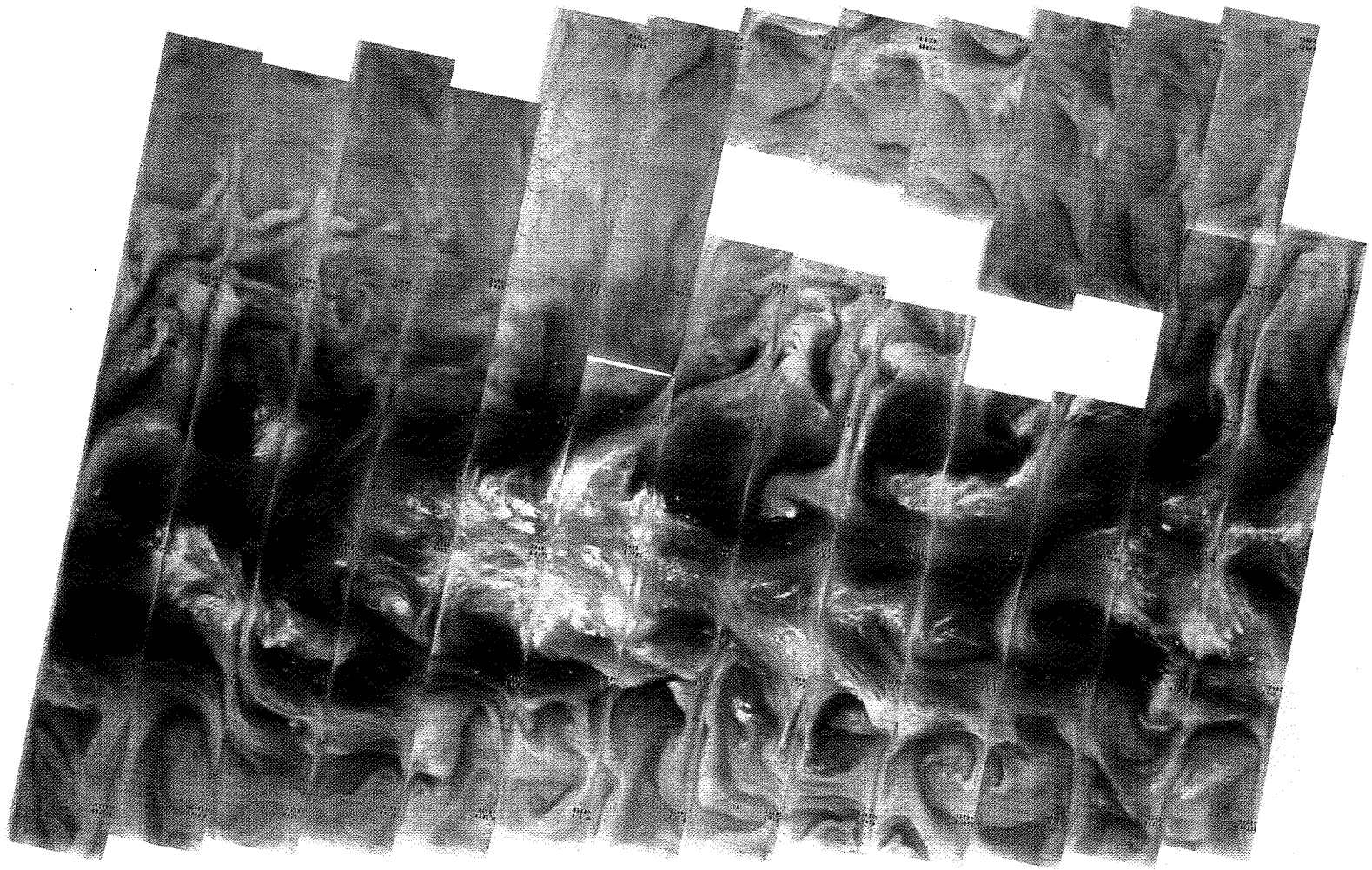
6.7 μm



5096 5095 5094 5093 5092 5091 5090 5089 5088 5087 5086 5085 5084

25 DECEMBER 1973

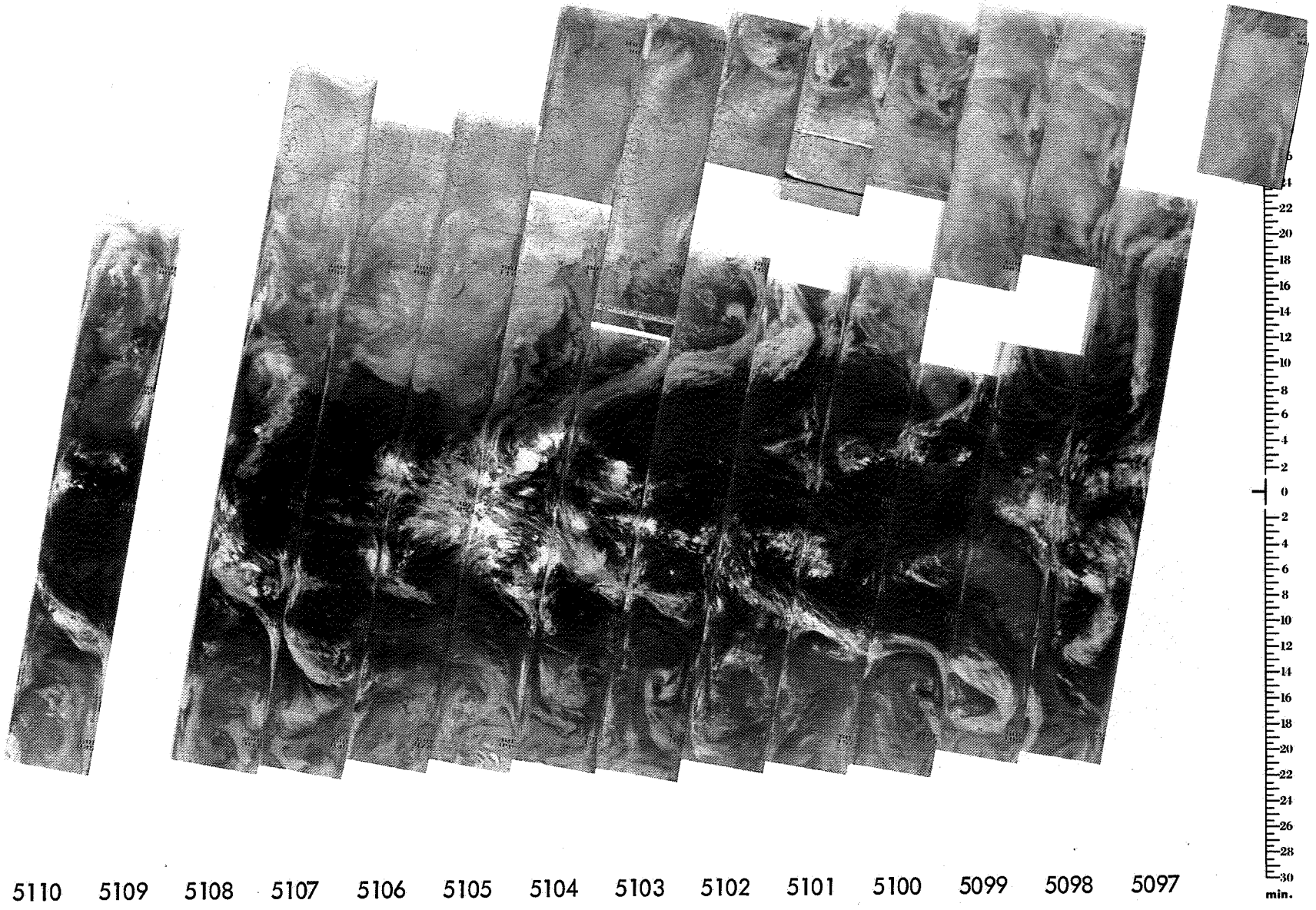
11.5 μm



5096 5095 5094 5093 5092 5091 5090 5089 5088 5087 5086 5085 5084

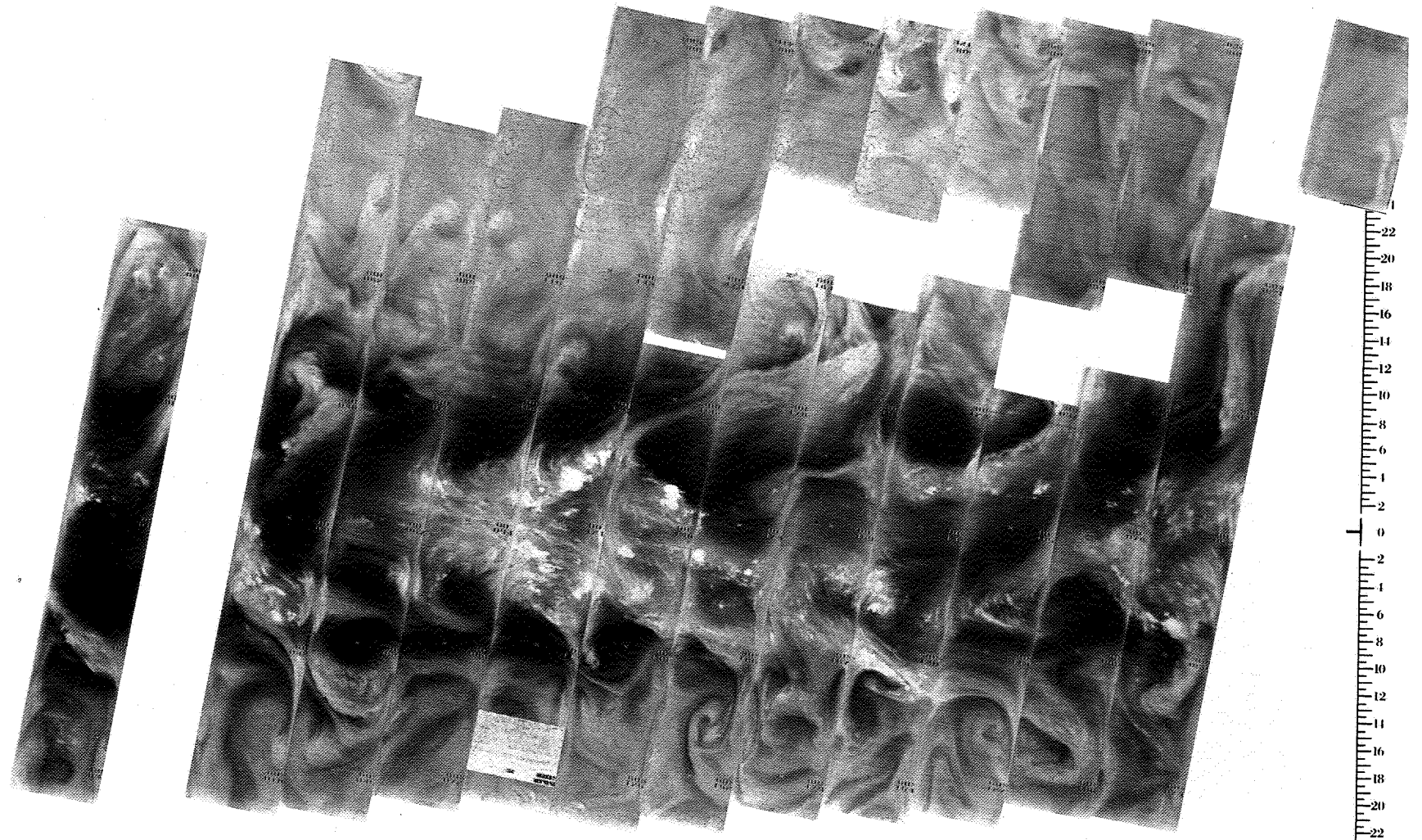
25 DECEMBER 1973

6.7 μm



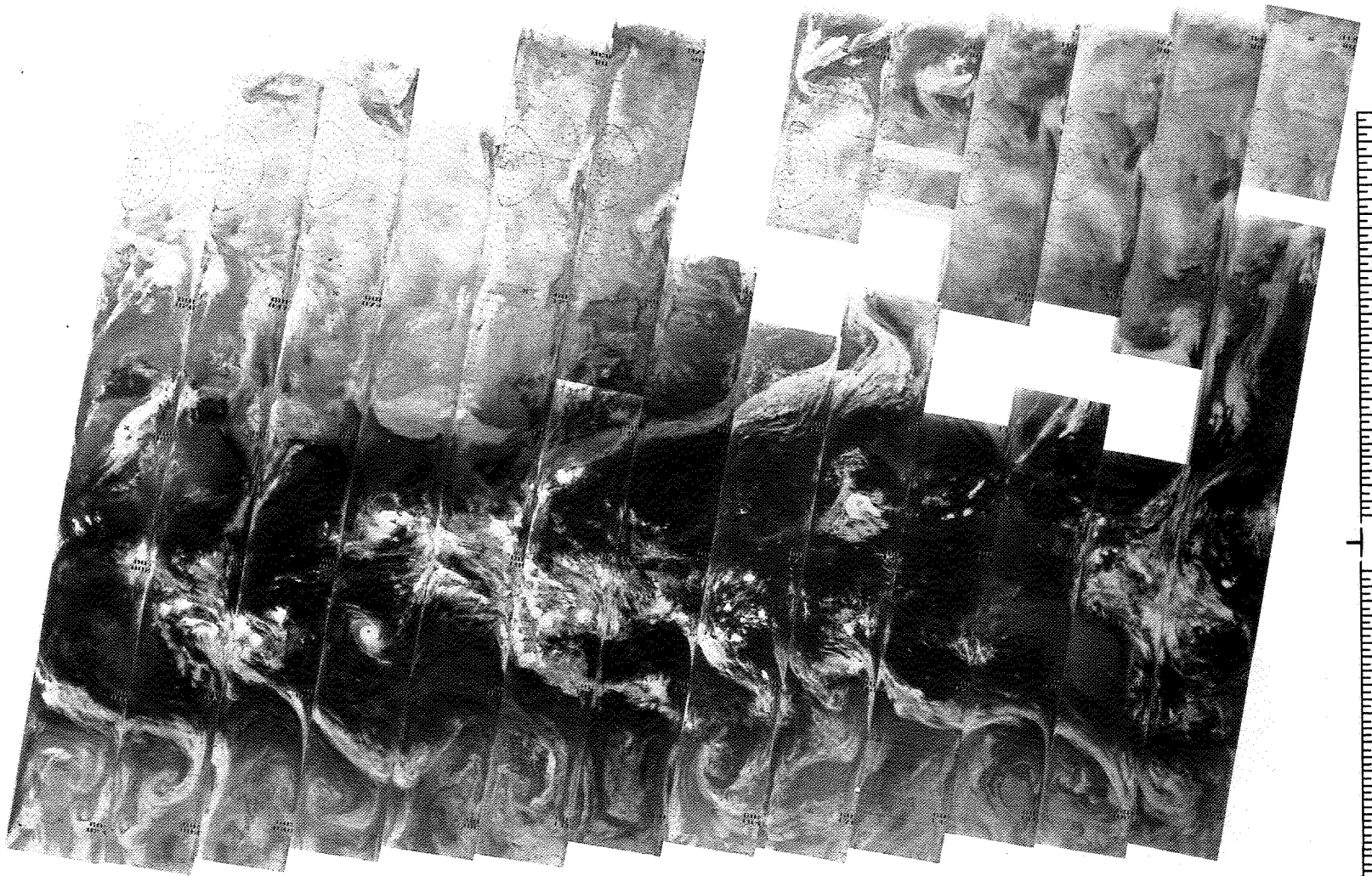
26 DECEMBER 1973

11.5 μm



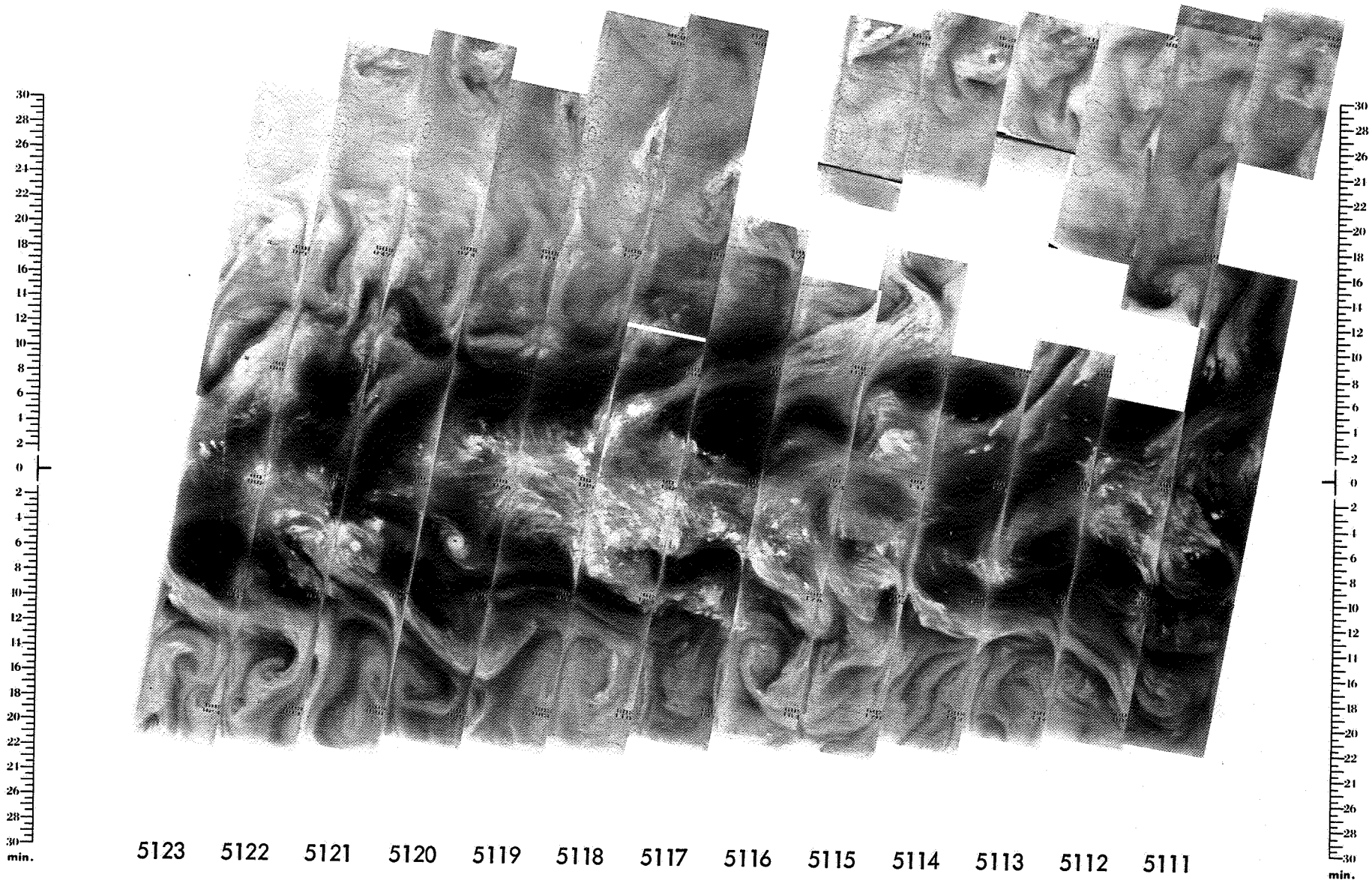
26 DECEMBER 1973

6.7 μm



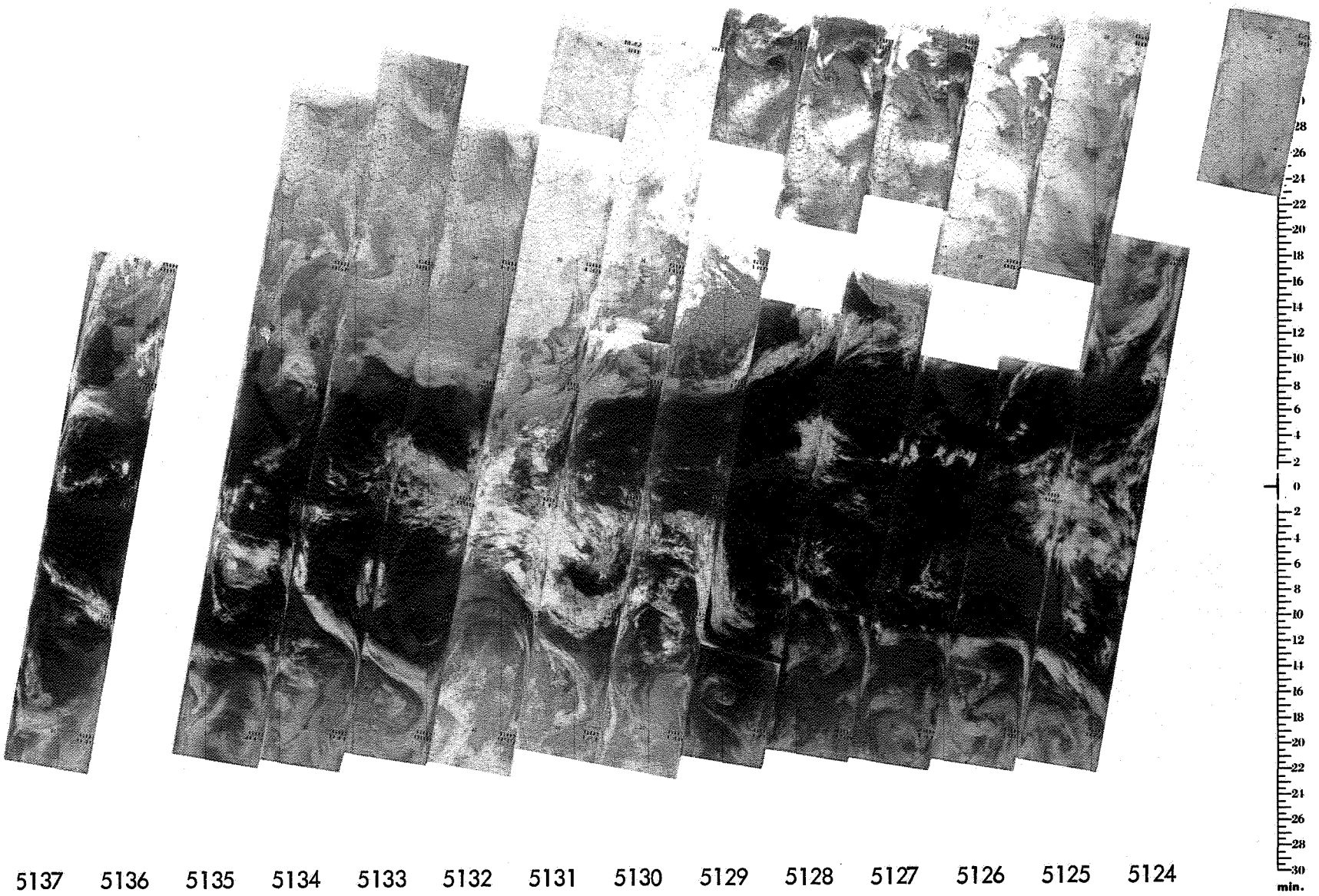
27 DECEMBER 1973

11.5 μm



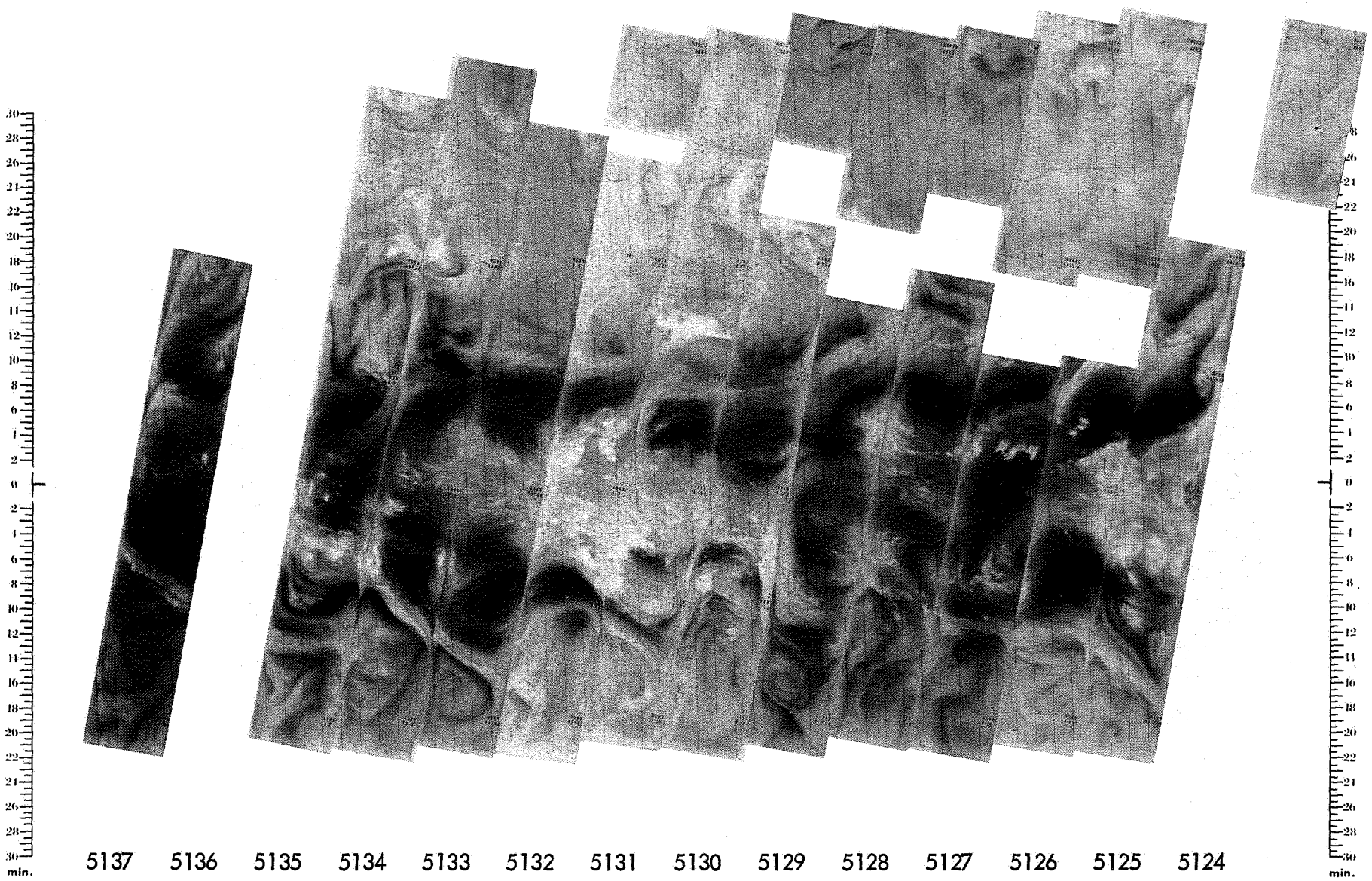
27 DECEMBER 1973

6.7μm



28 DECEMBER 1973

11.5 μm



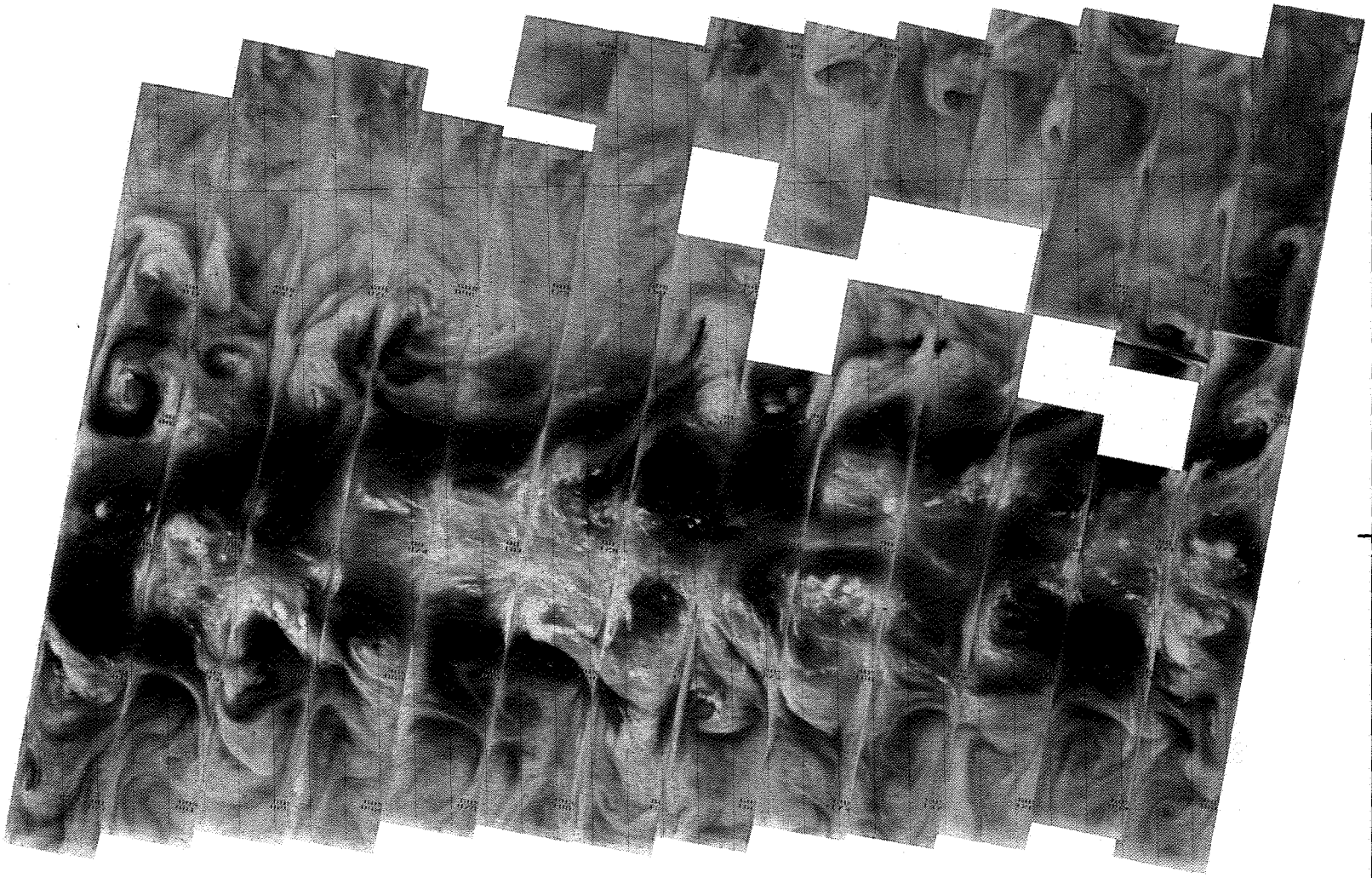
28 DECEMBER 1973

6.7 μm



29 DECEMBER 1973

11.5 μm

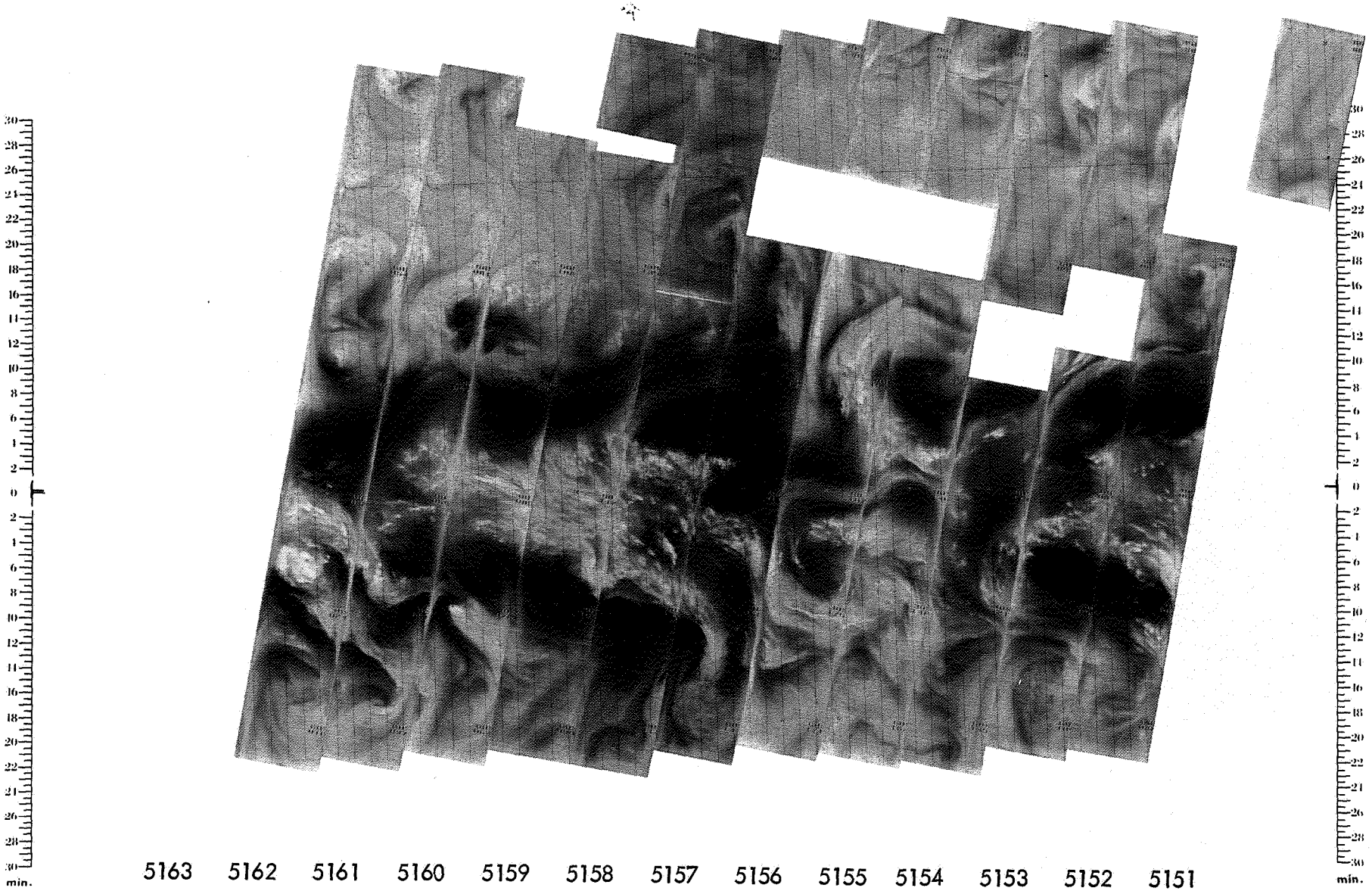


5150 5149 5148 5147 5146 5145 5144 5143 5142 5141 5140 5139 5138

29 DECEMBER 1974

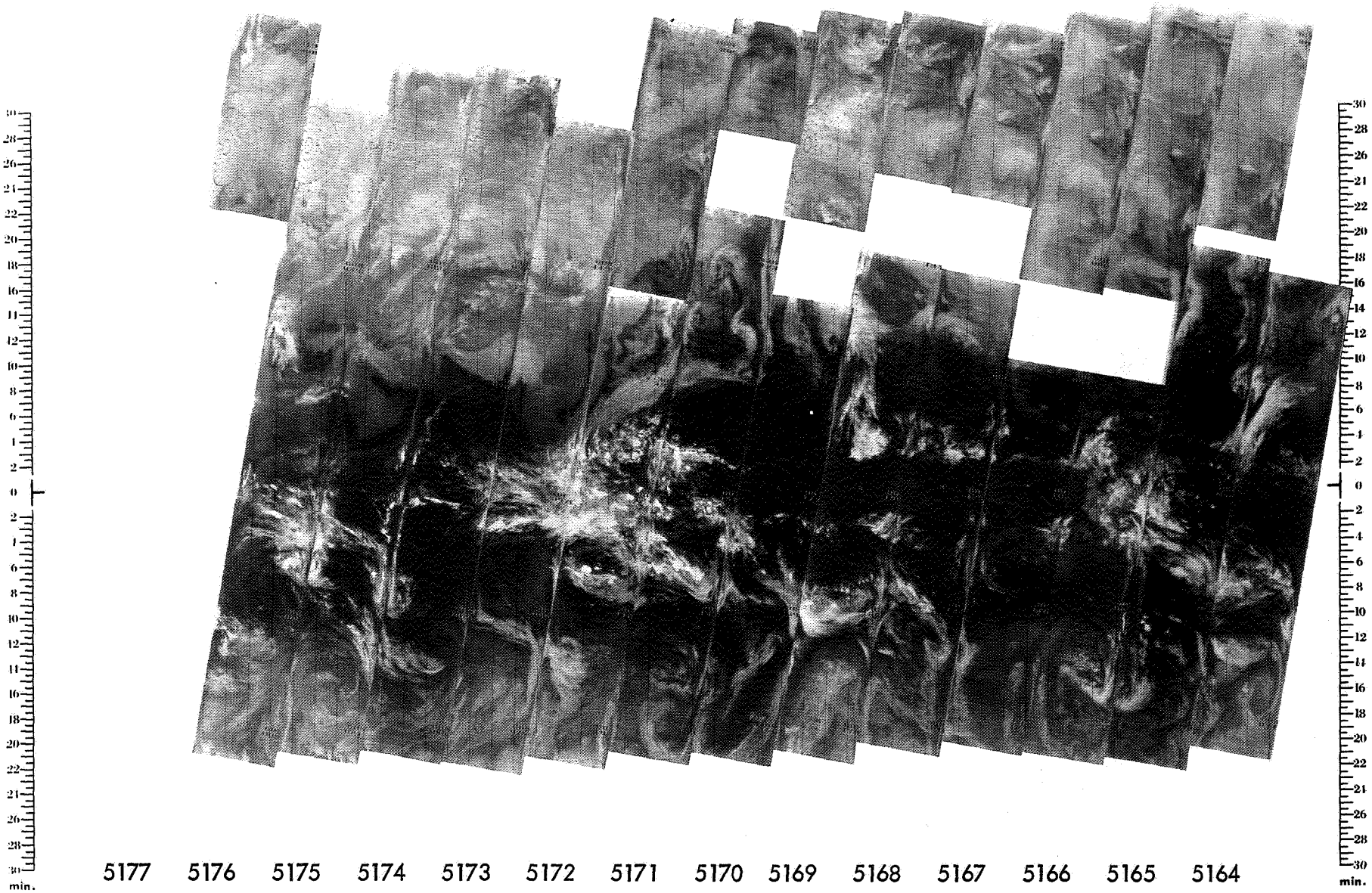
6.7 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.
5163 5162 5161 5160 5159 5158 5157 5156 5155 5154 5153 5152 5151
30 DECEMBER 1973
11.5 μm



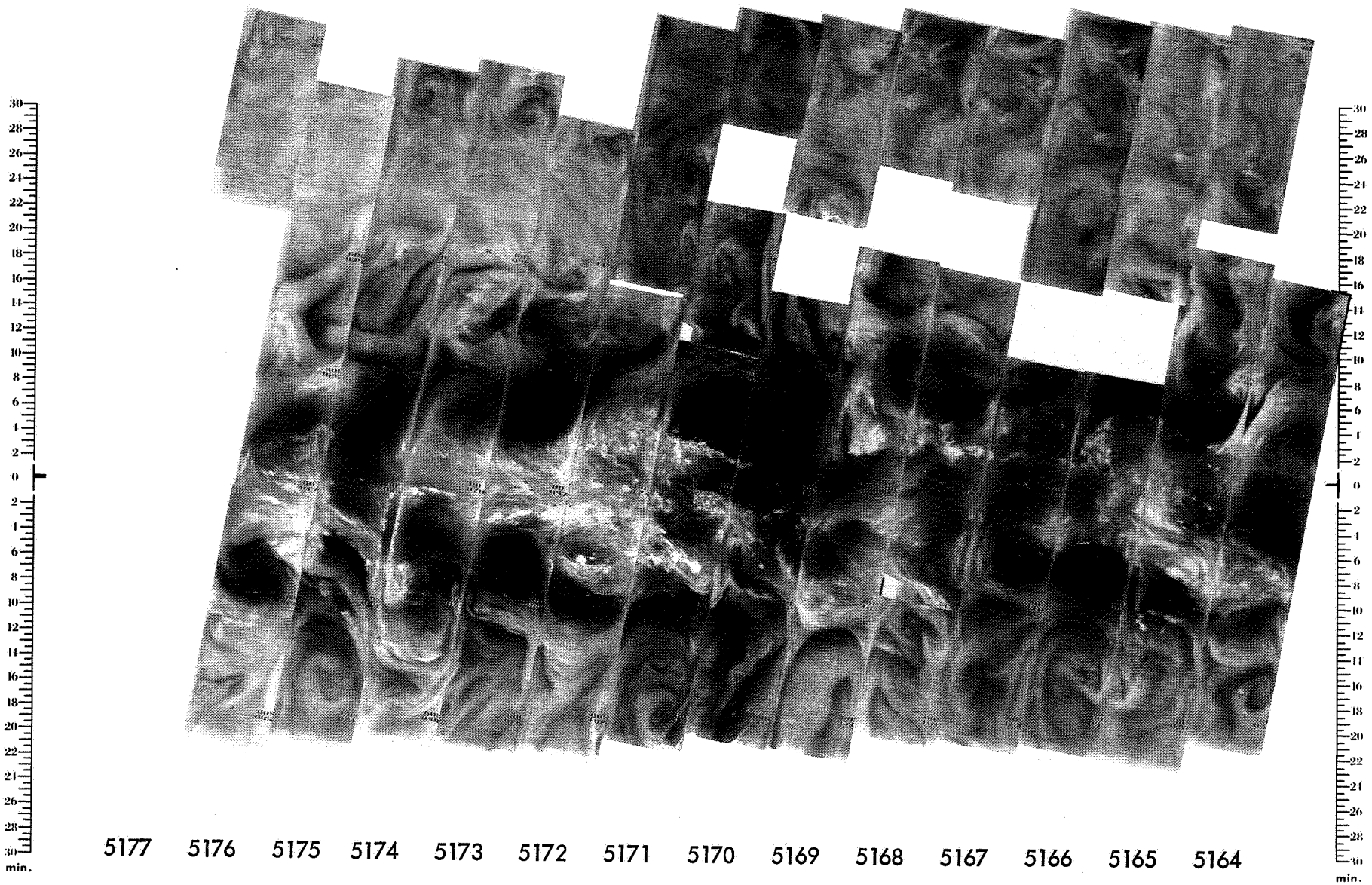
30 DECEMBER 1973

6.7 μm



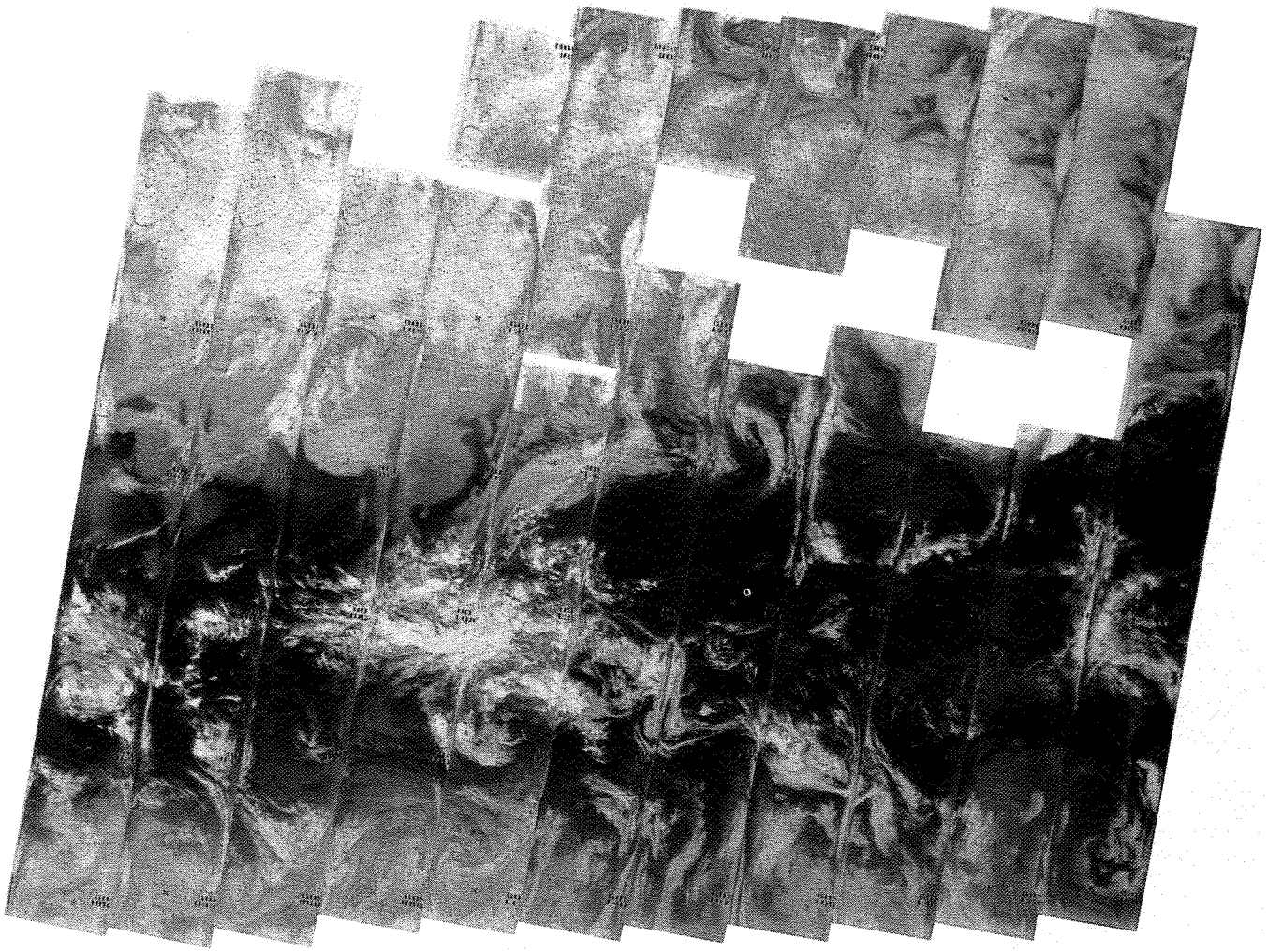
31 DECEMBER 1973

11.5 μm



31 DECEMBER 1973

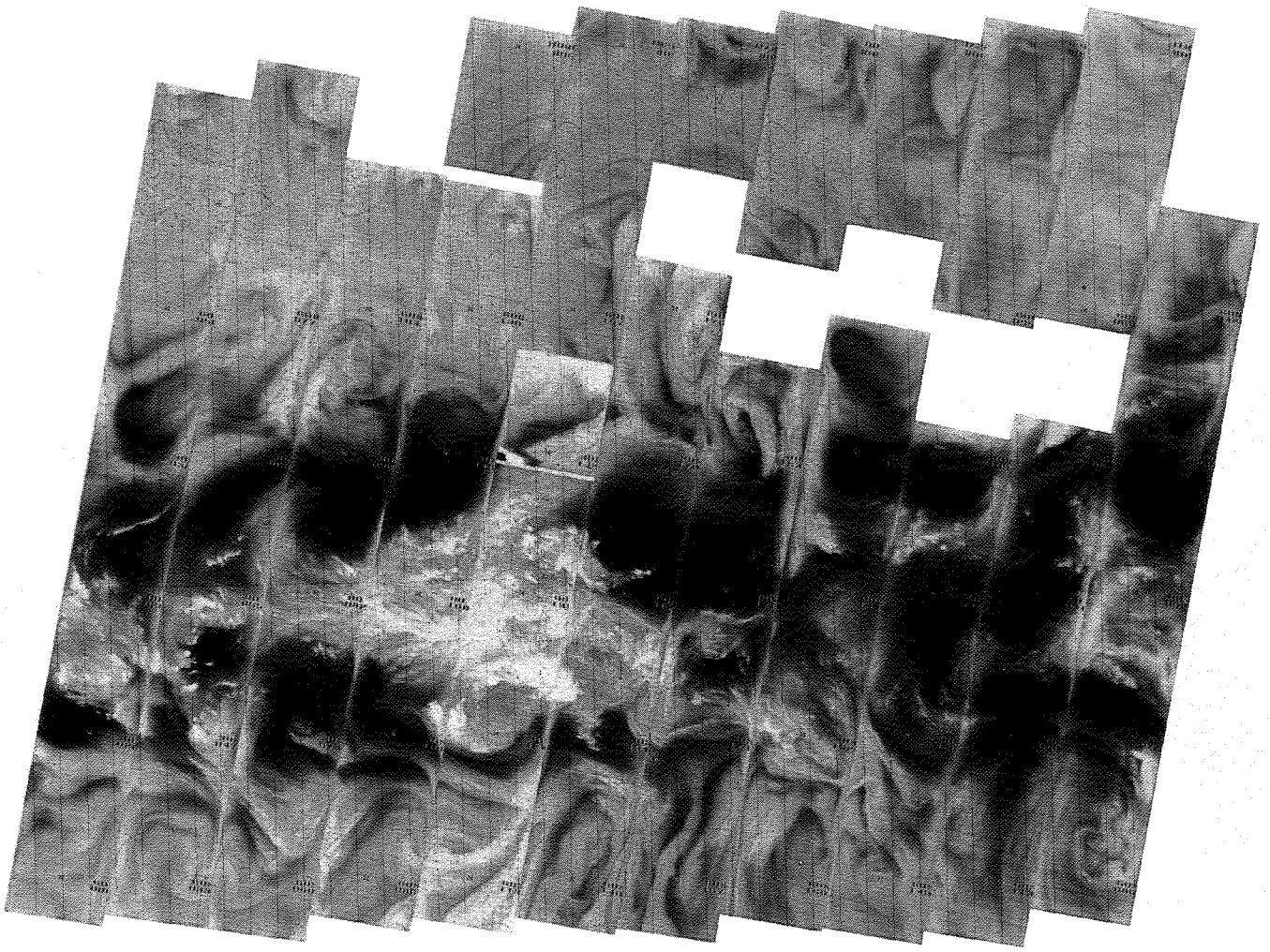
6.7 μm



5190 5189 5188 5187 5186 5185 5184 5183 5182 5181 5180 5179 5178

1 JANUARY 1974

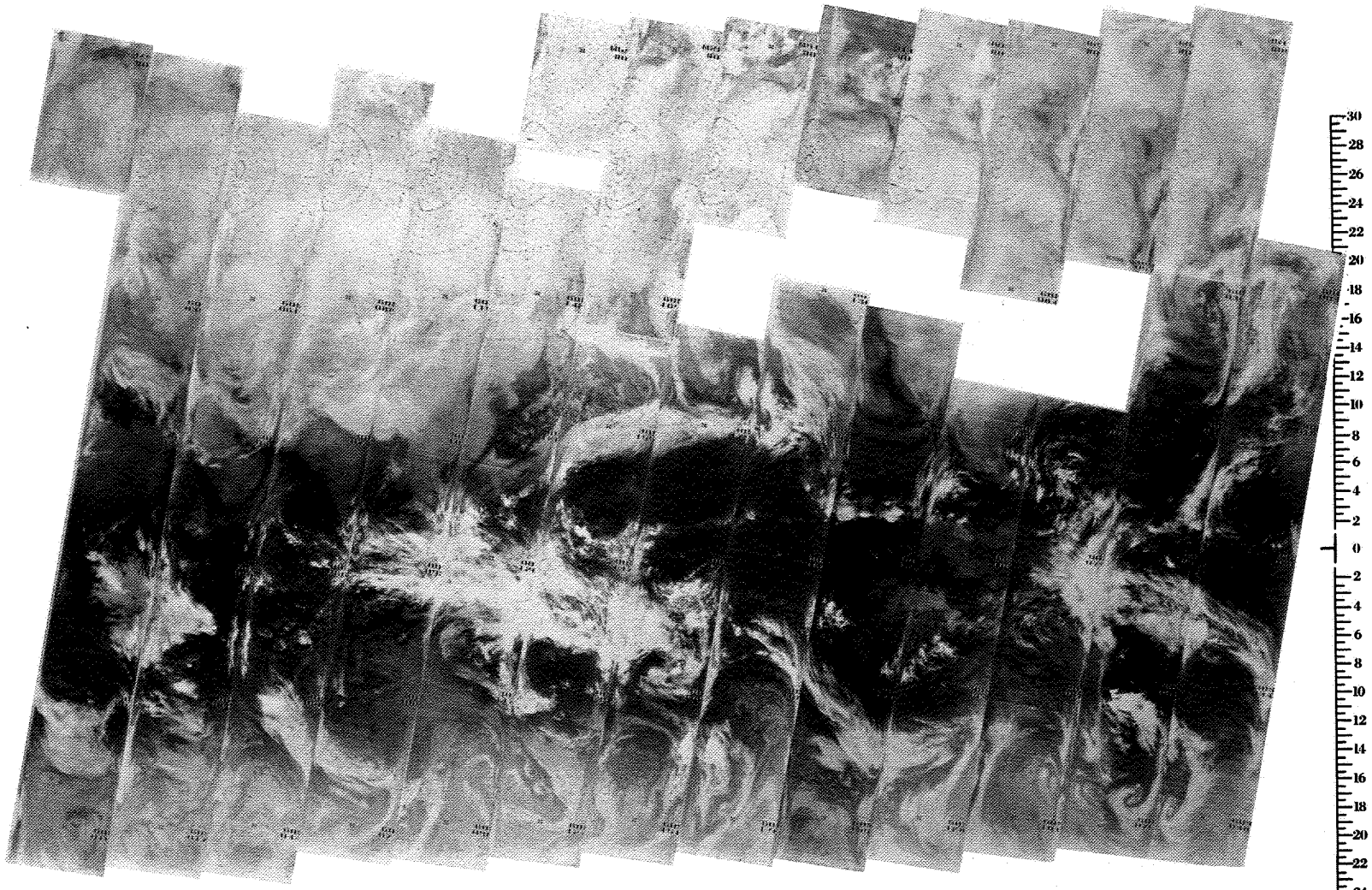
11.5 μm



5190 5189 5188 5187 5186 5185 5184 5183 5182 5181 5180 5179 5178

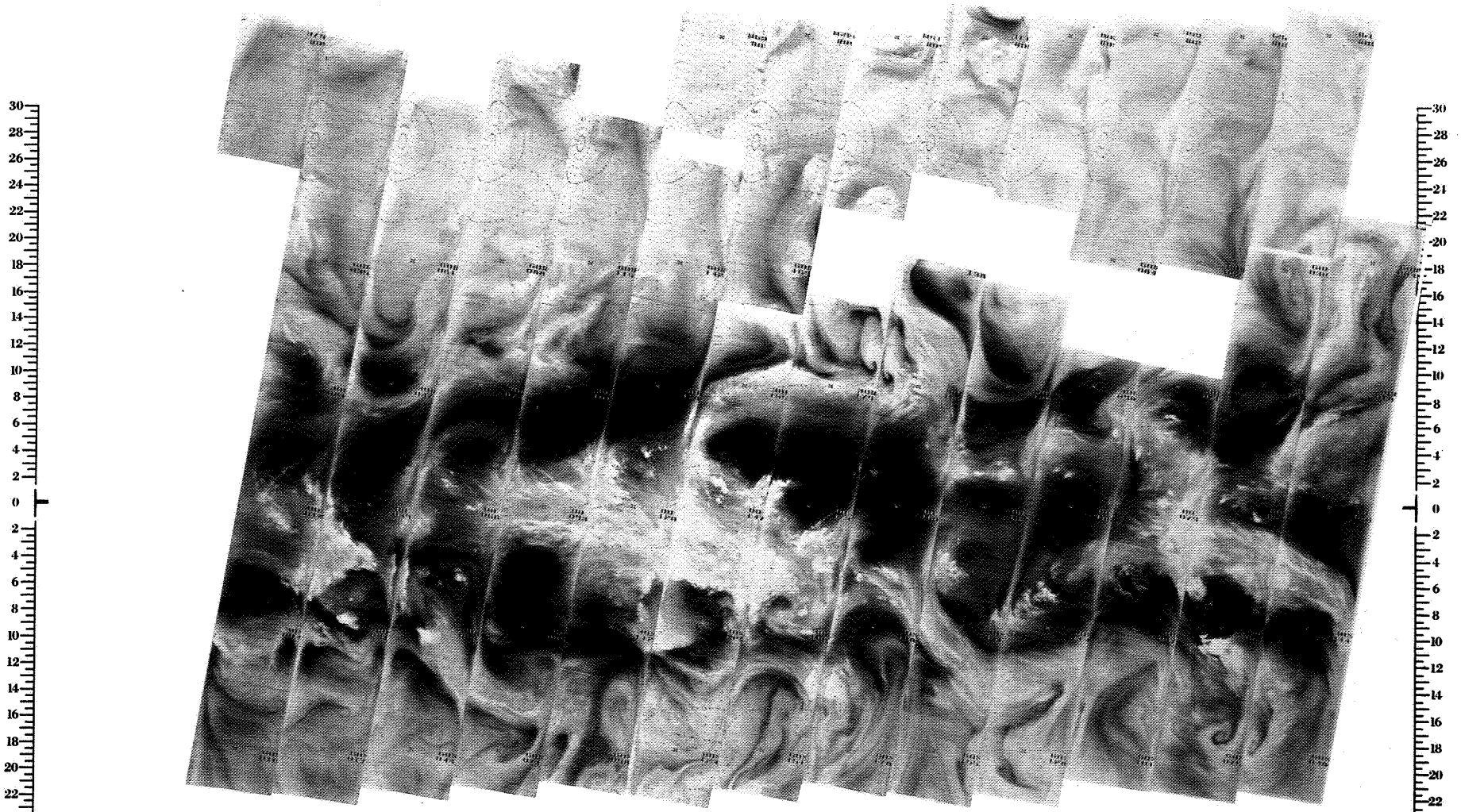
1 JANUARY 1974

6.7 μm



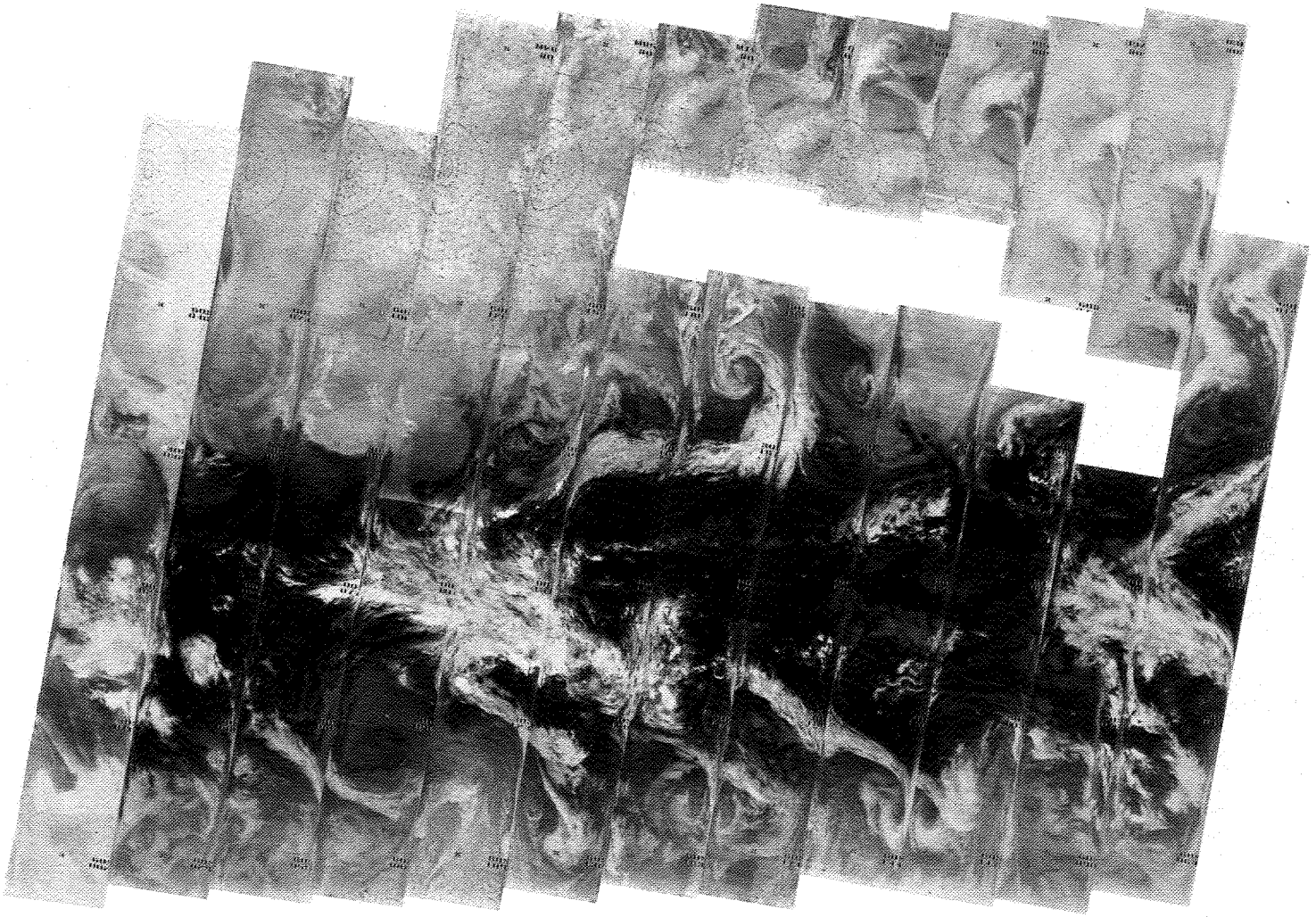
2 JANUARY 1974

11.5 μm



2 JANUARY 1974

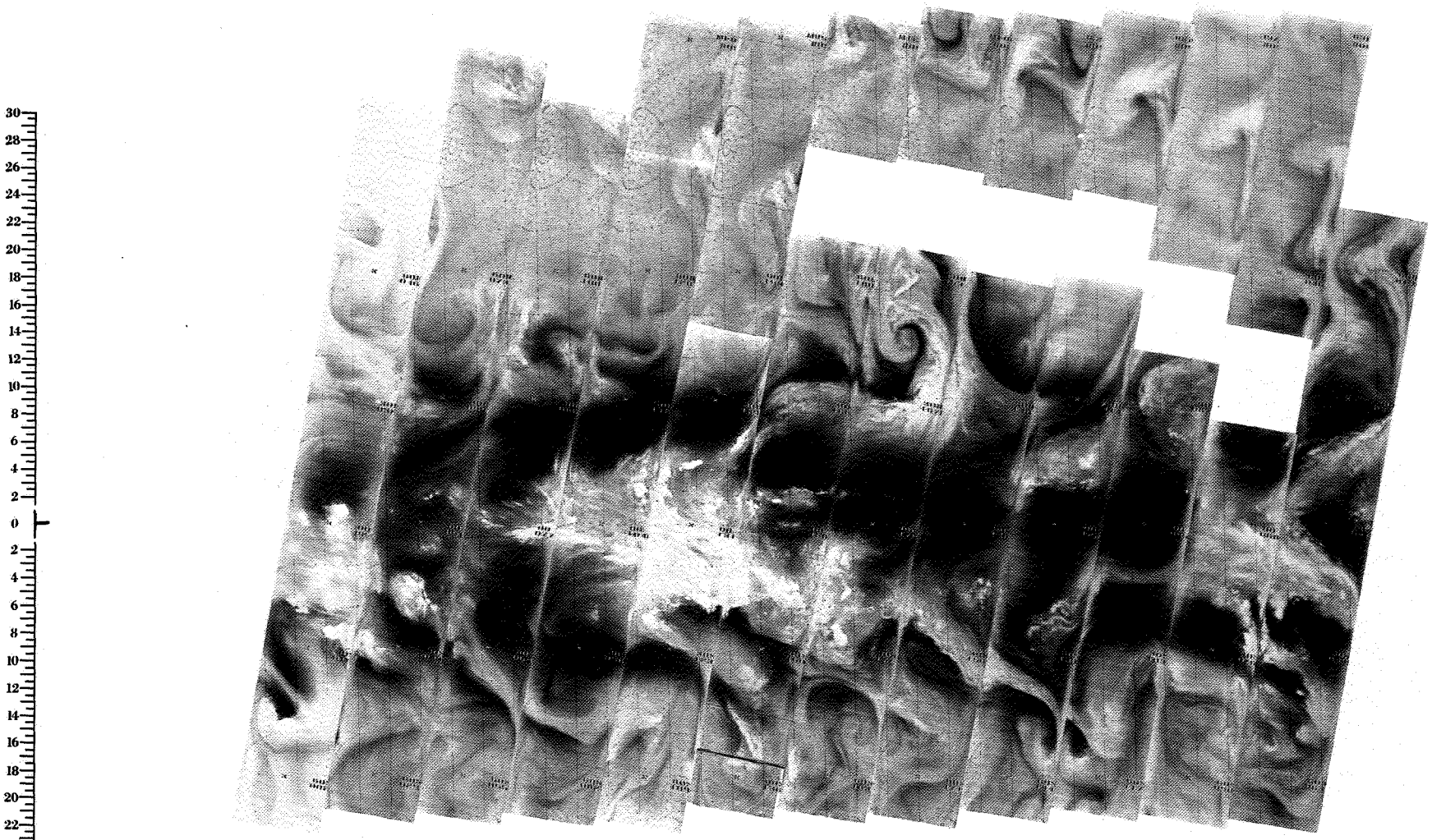
6.7 μm

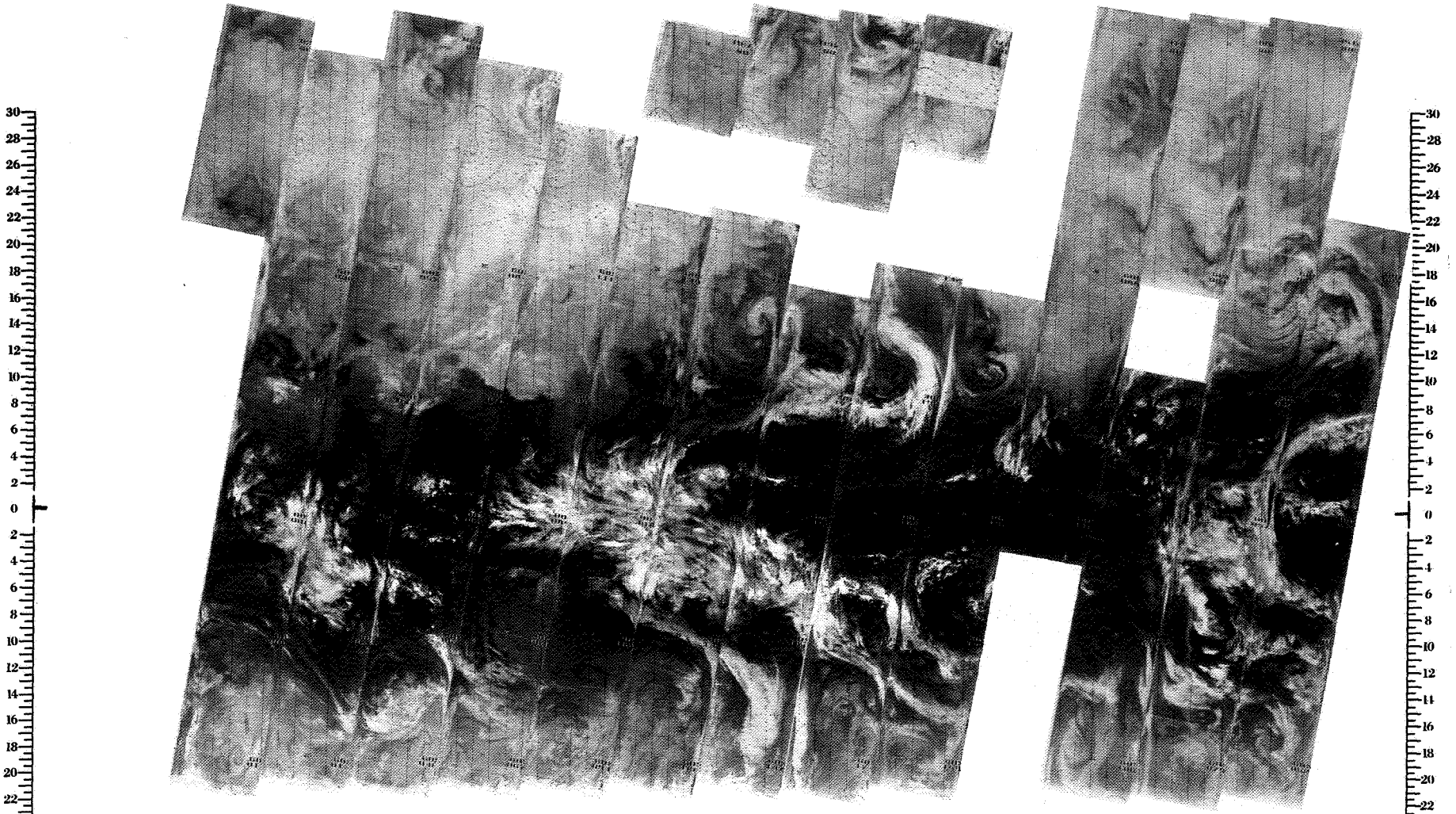


5217 5216 5215 5214 5213 5212 5211 5210 5209 5208 5207 5206 5205

3 JANUARY 1974

11.5 μm

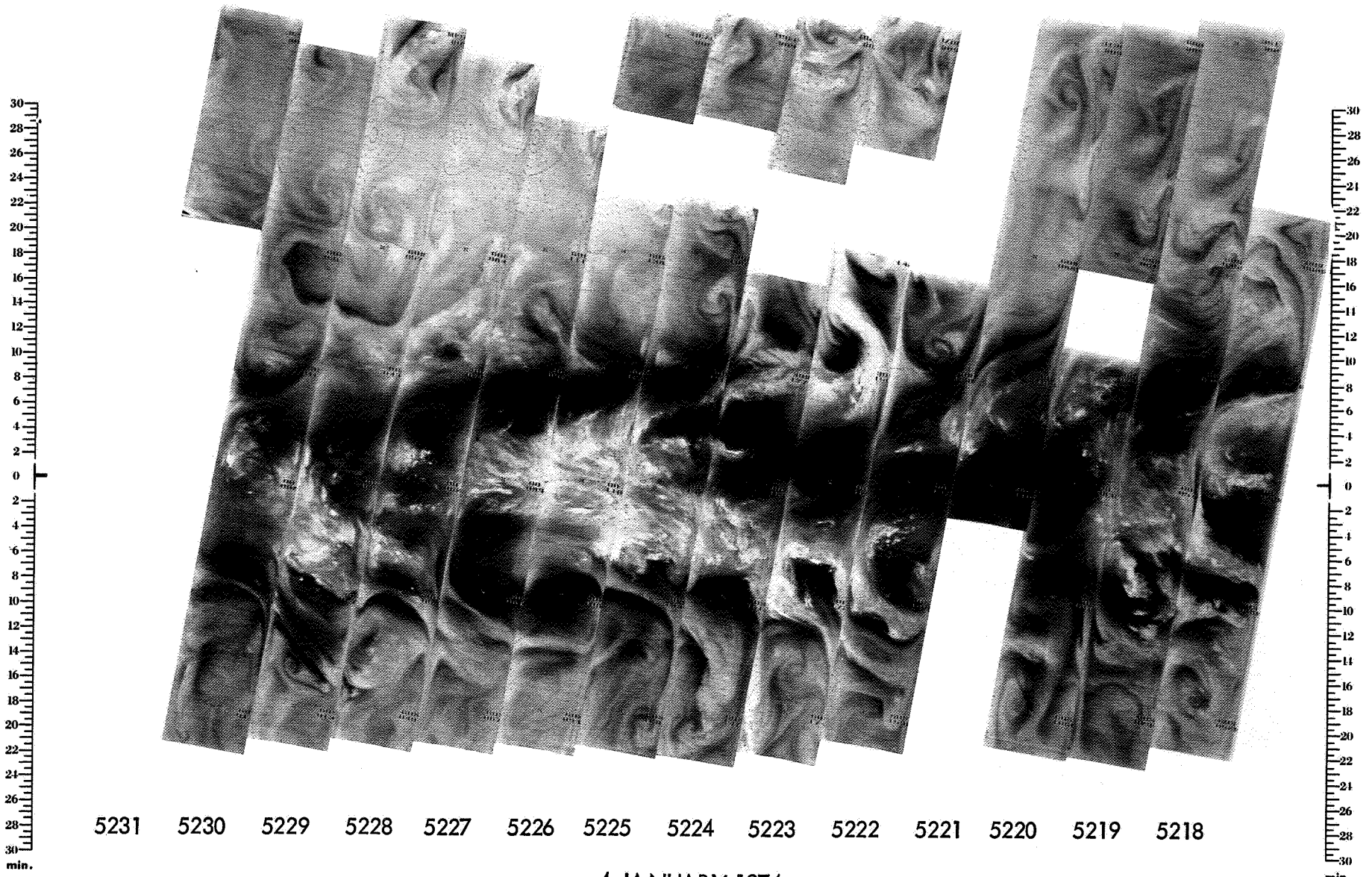

5217 5216 5215 5214 5213 5212 5211 5210 5209 5208 5207 5206 5205
3 JANUARY 1974
6.7 μm
min.
min.

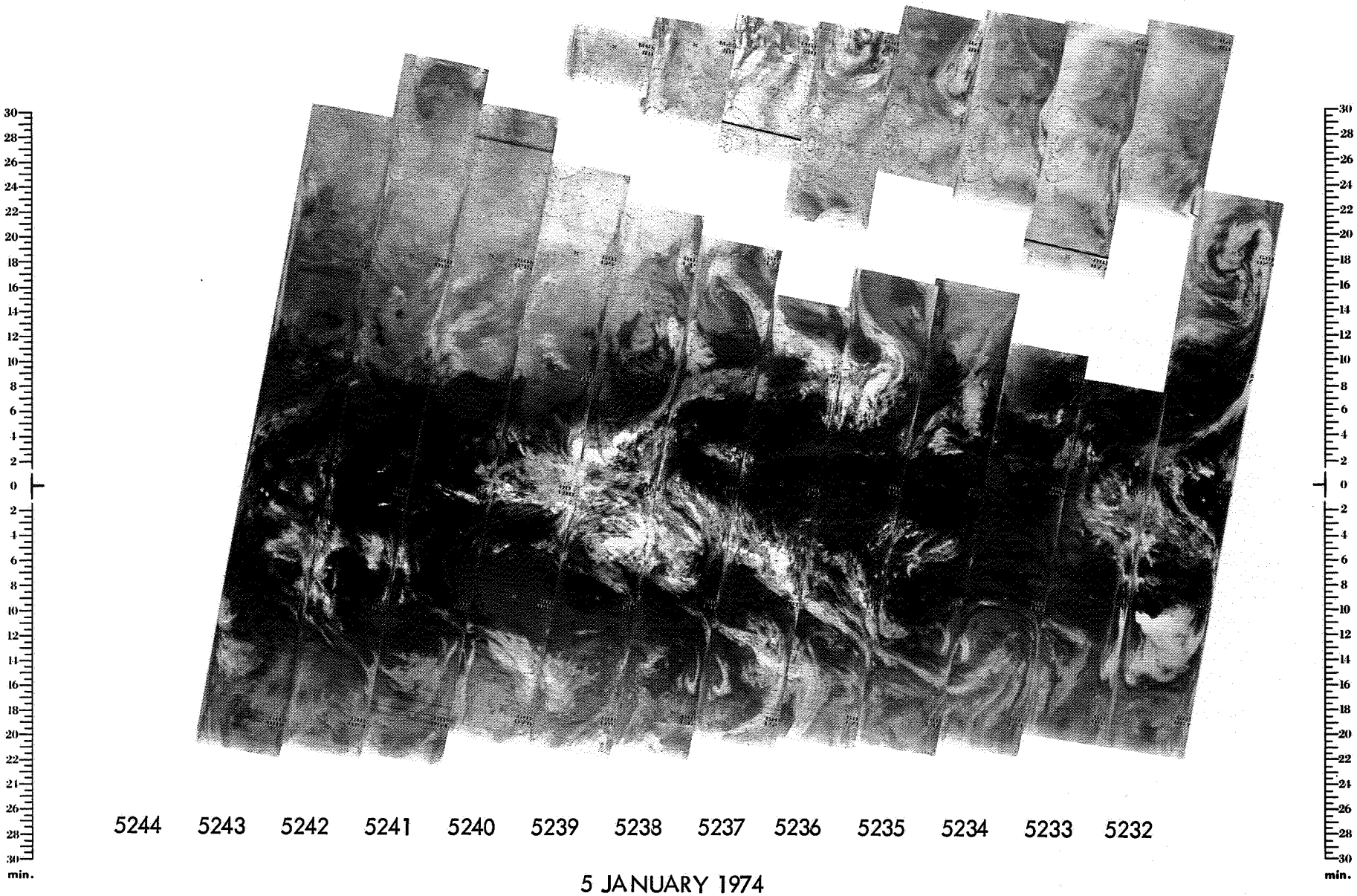


5231 5230 5229 5228 5227 5226 5225 5224 5223 5222 5221 5220 5219 5218

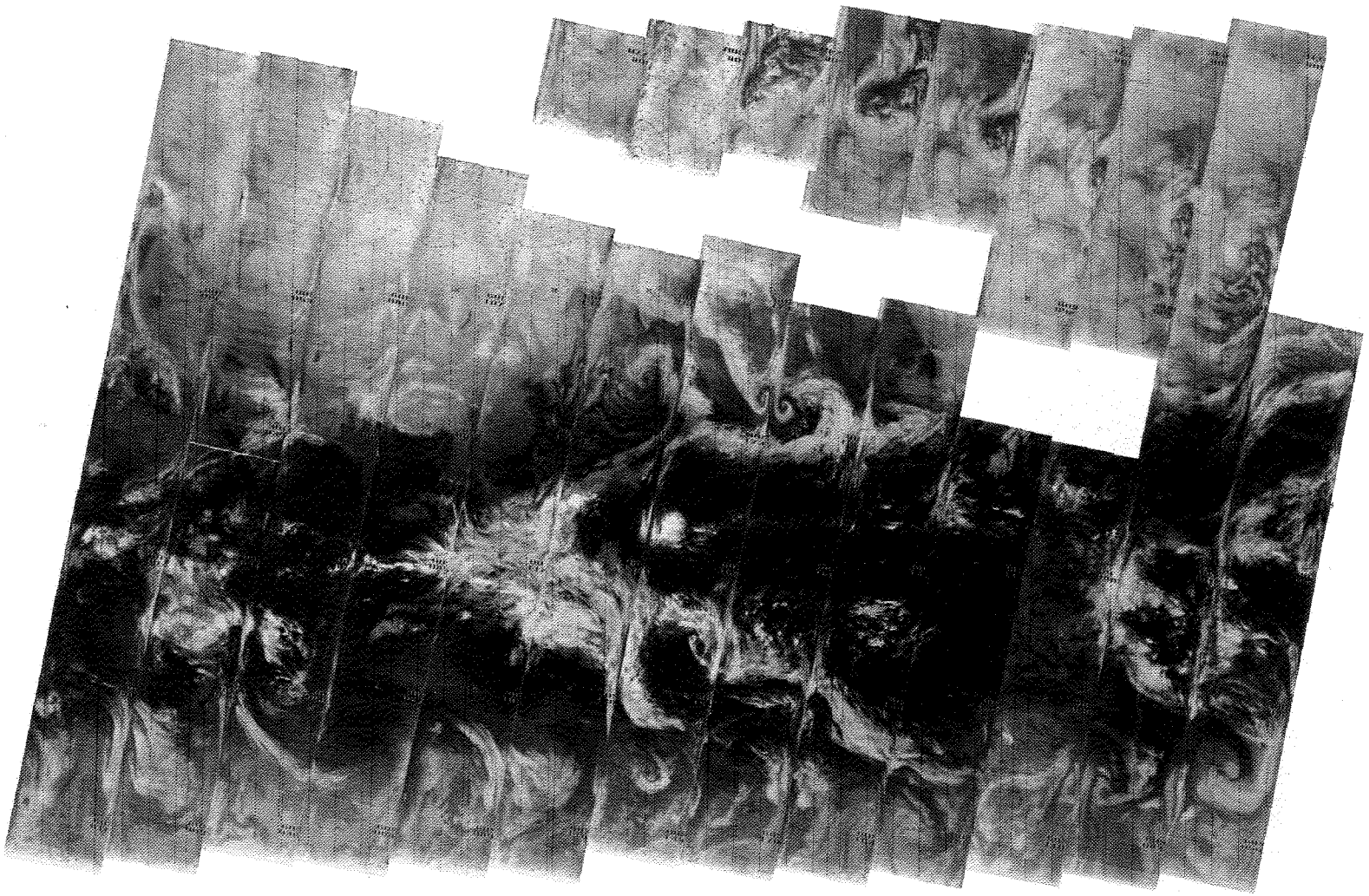
4 JANUARY 1974

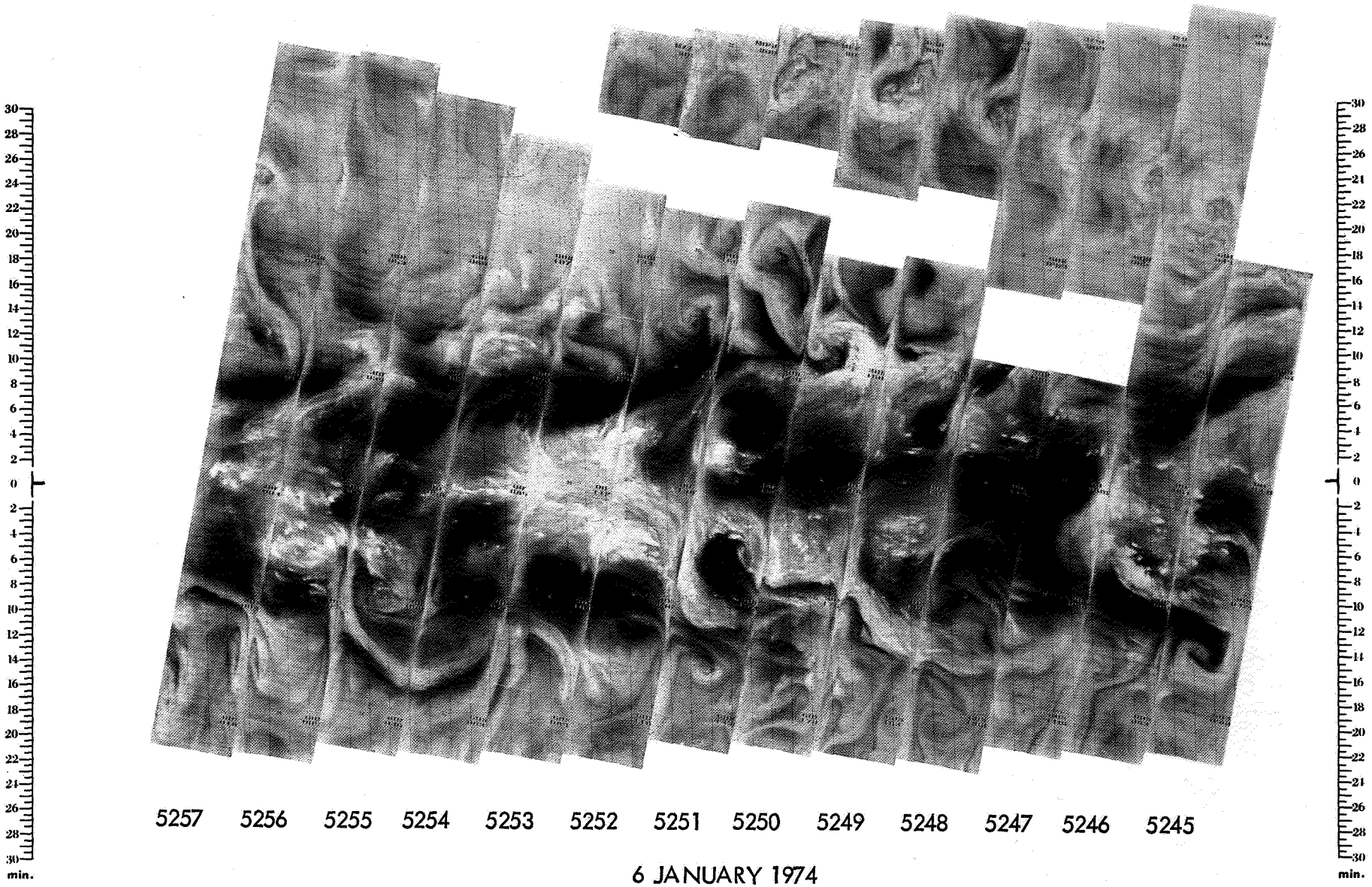
11.5 μm


5231 5230 5229 5228 5227 5226 5225 5224 5223 5222 5221 5220 5219 5218
4 JANUARY 1974
6.7 μm
min.
min.


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
5244 5243 5242 5241 5240 5239 5238 5237 5236 5235 5234 5233 5232
5 JANUARY 1974
11.5 μm

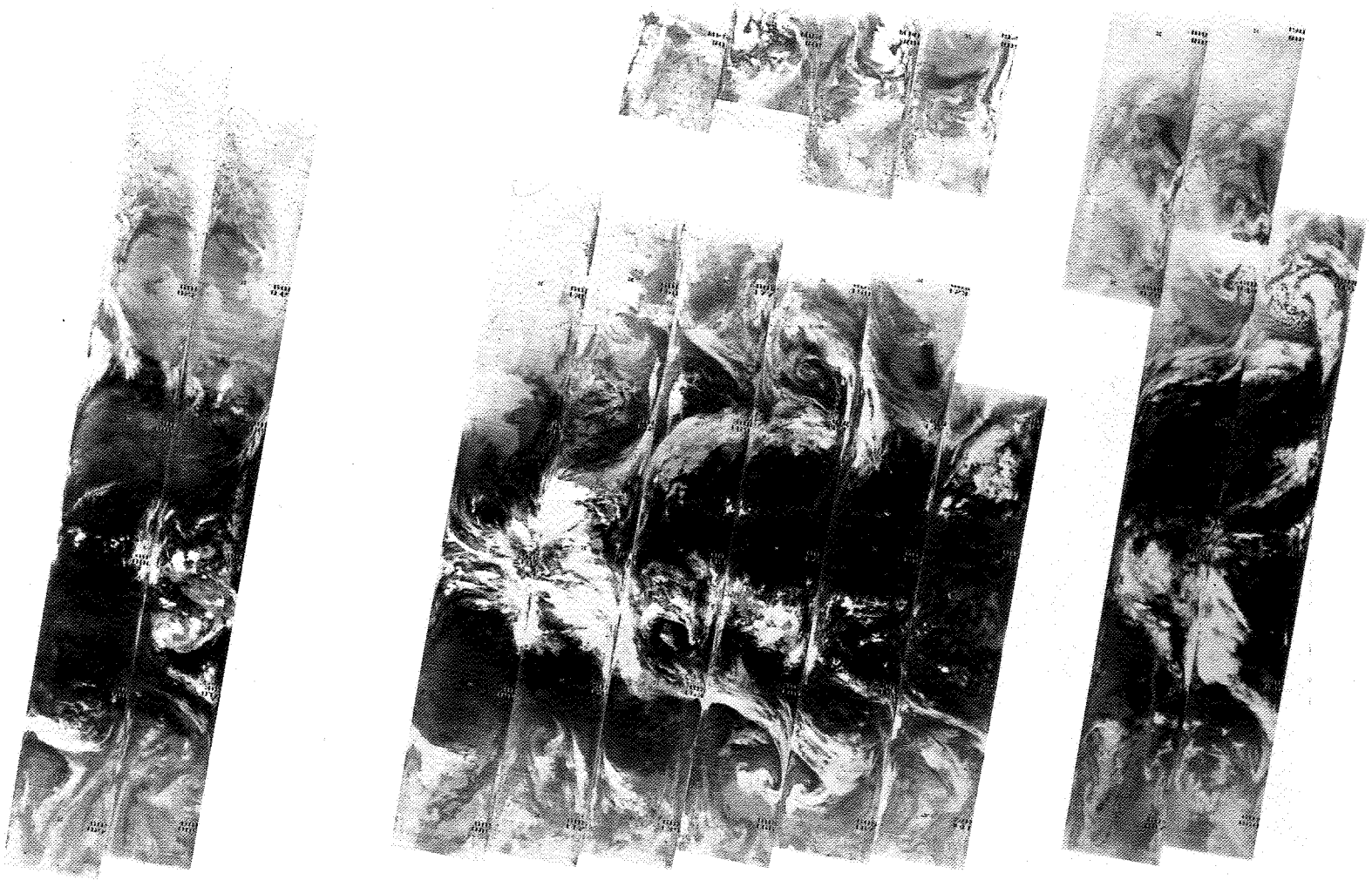
5232
5233
5234
5235
5236
5237
5238
5239
5240
5241
5242
5243
5244
5 JANUARY 1974
6.7 μm
min.


5257 5256 5255 5254 5253 5252 5251 5250 5249 5248 5247 5246 5245
6 JANUARY 1974
11.5 μm
min.
min.


5257
5256
5255
5254
5253
5252
5251
5250
5249
5248
5247
5246
5245
6 JANUARY 1974
6.7 μm
min.
min.

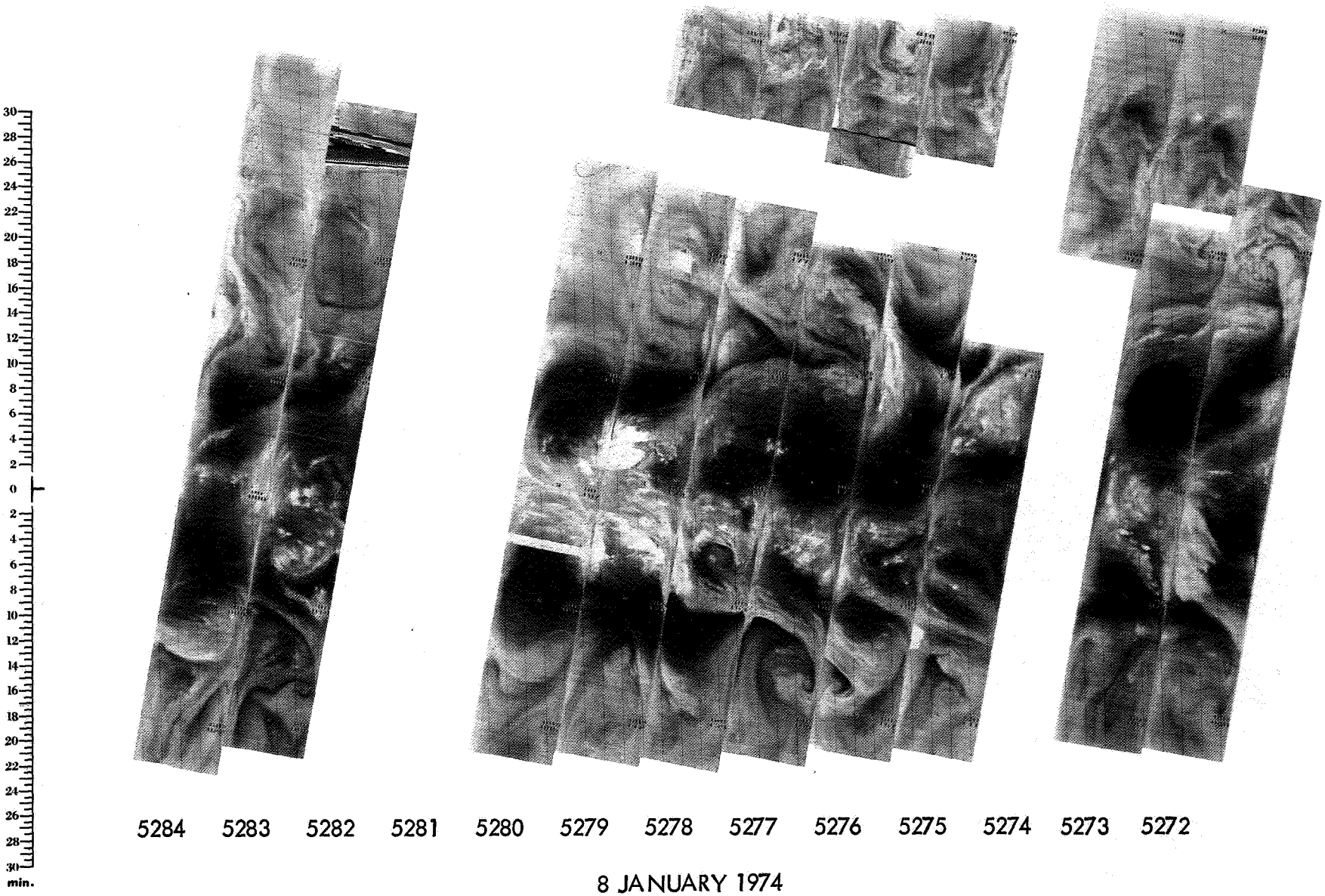
5271
5270
5269
5268
5267
5266
5265
5264
5263
5262
5261
5260
5259
5258
7 JANUARY 1974
11.5 μm
min.

5271 5270 5269 5268 5267 5266 5265 5264 5263 5262 5261 5260 5259 5258
7 JANUARY 1974
6.7 μm
min.



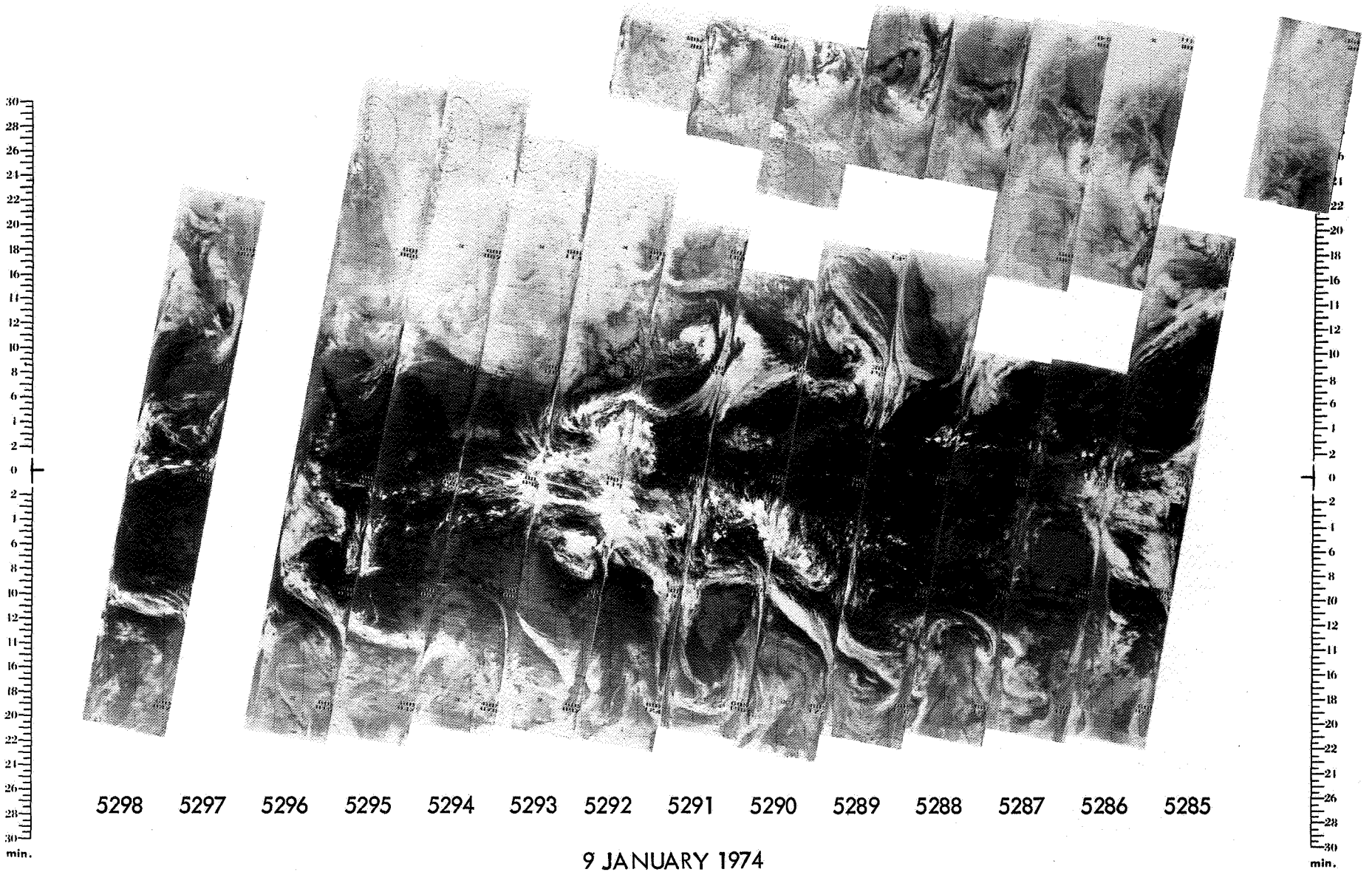
8 JANUARY 1974

11.5 μm



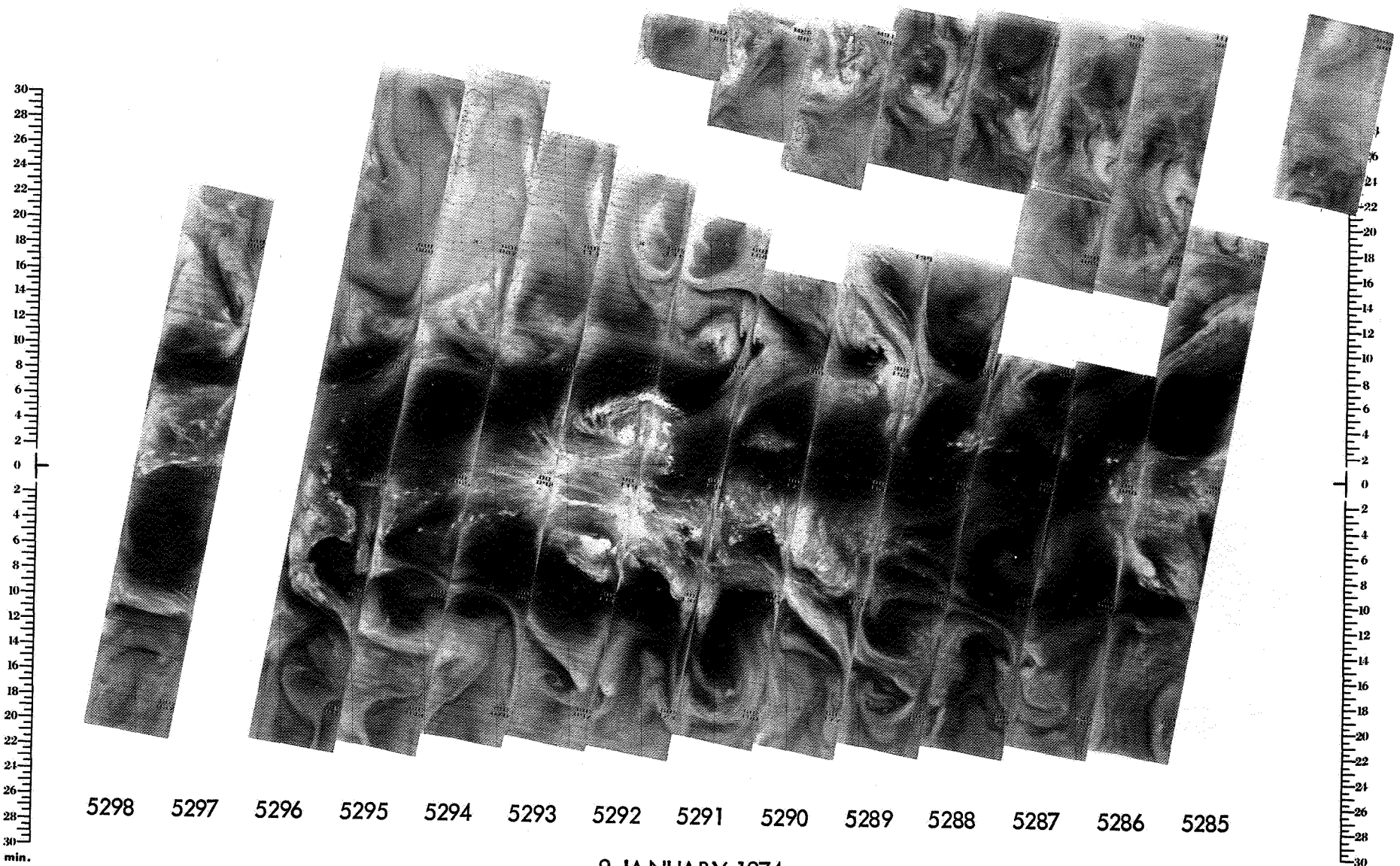
8 JANUARY 1974

6.7 μm



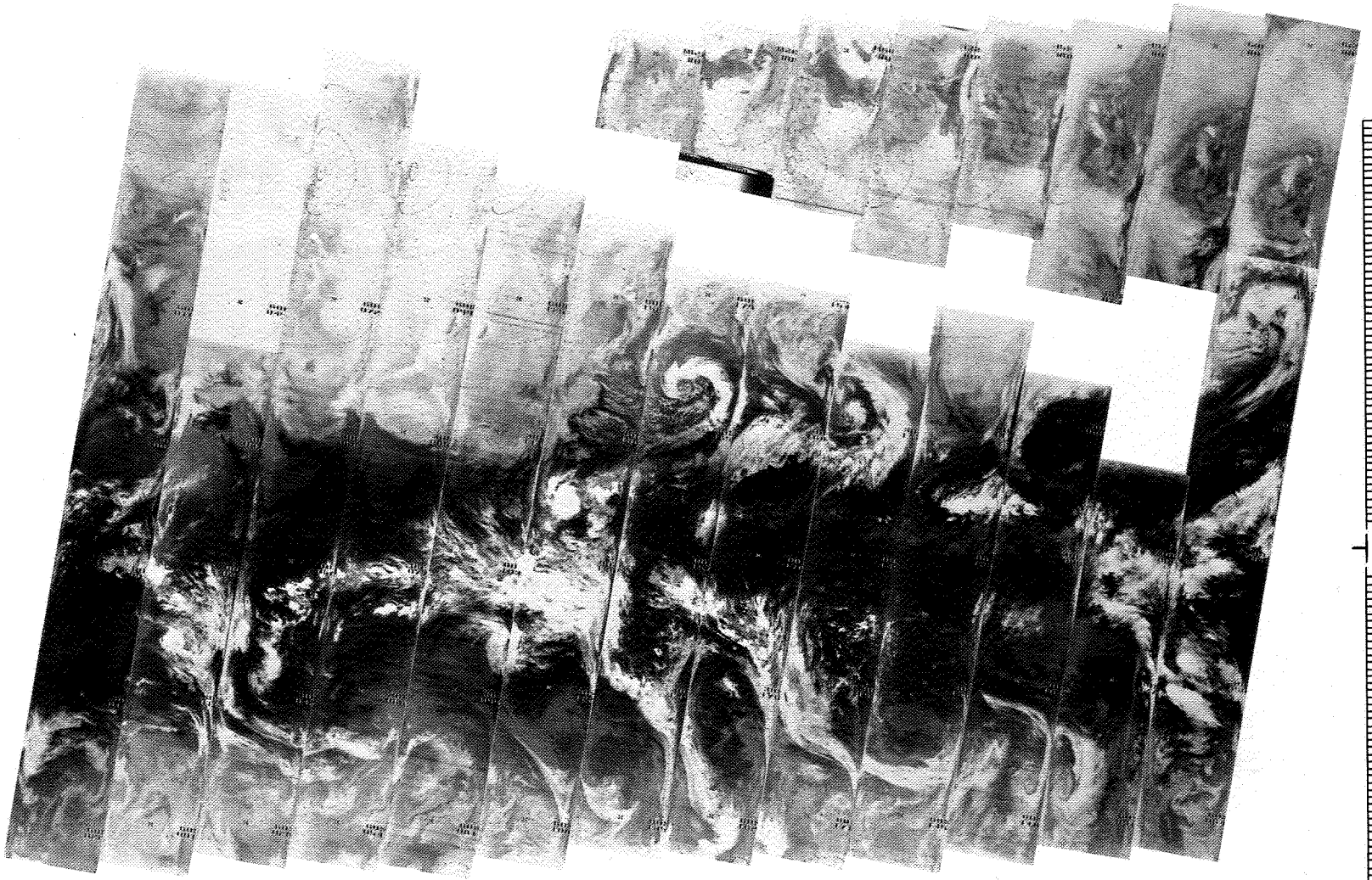
9 JANUARY 1974

11.5 μm



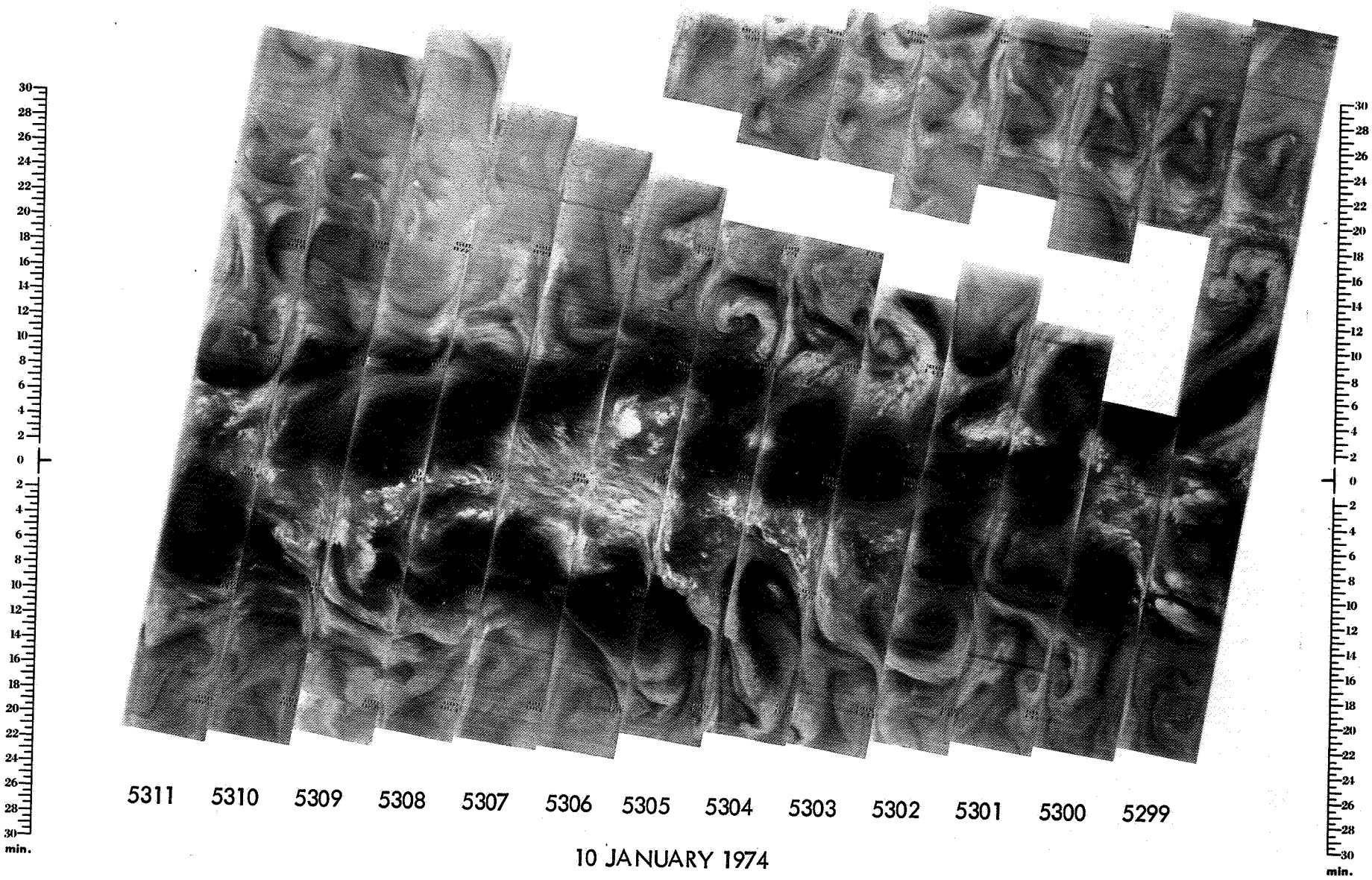
9 JANUARY 1974

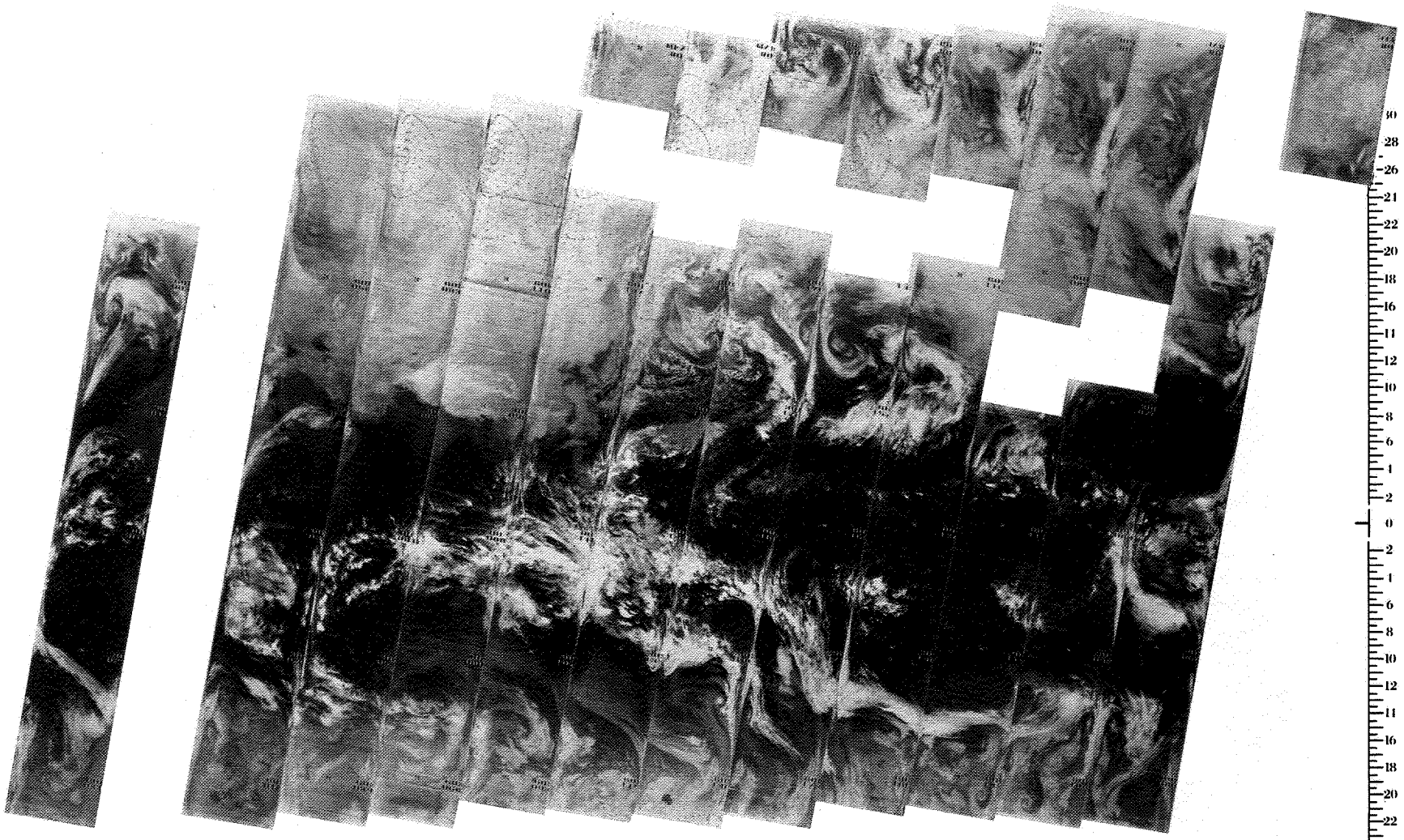
6.7 μm



10 JANUARY 1974

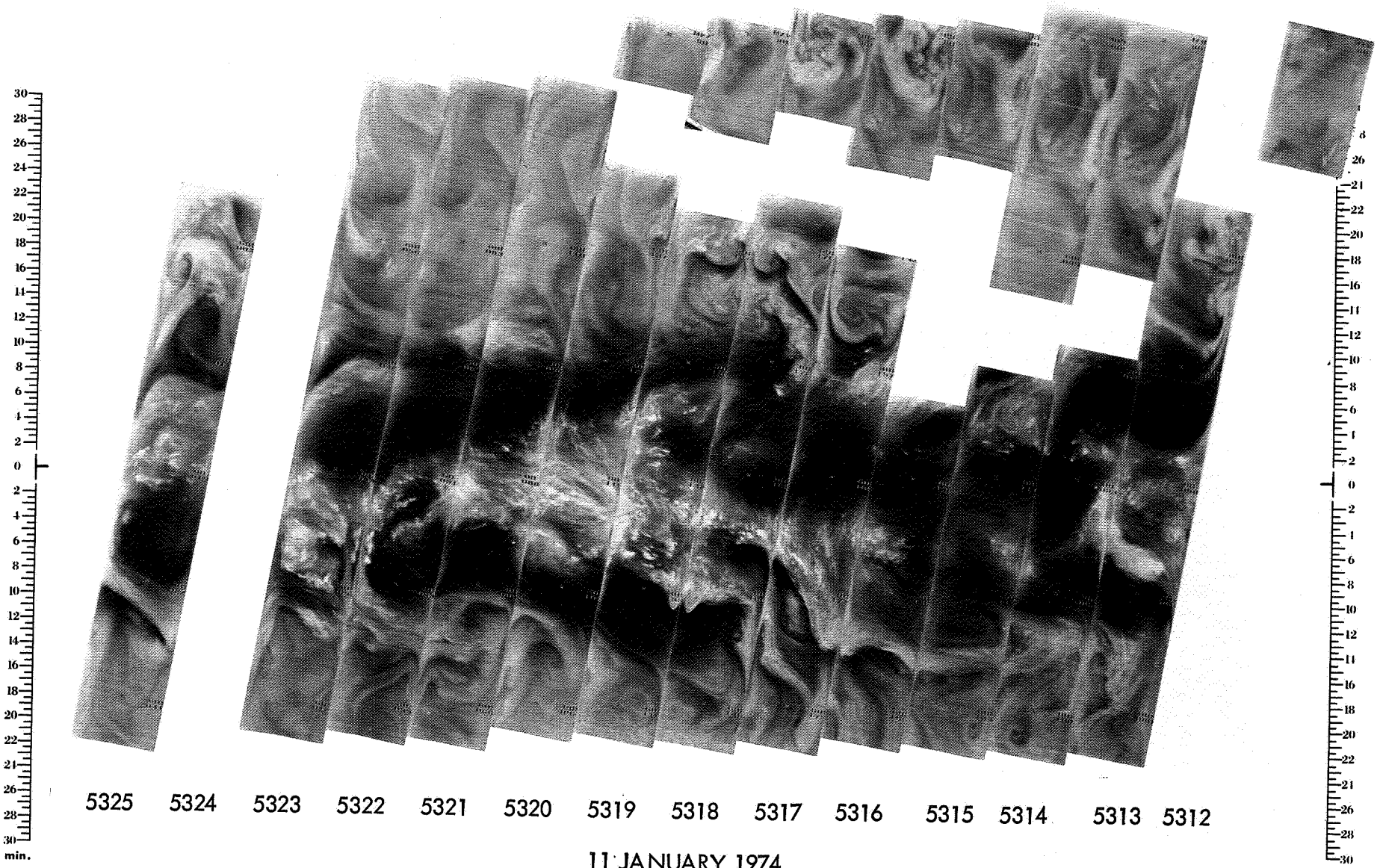
11.5 μm

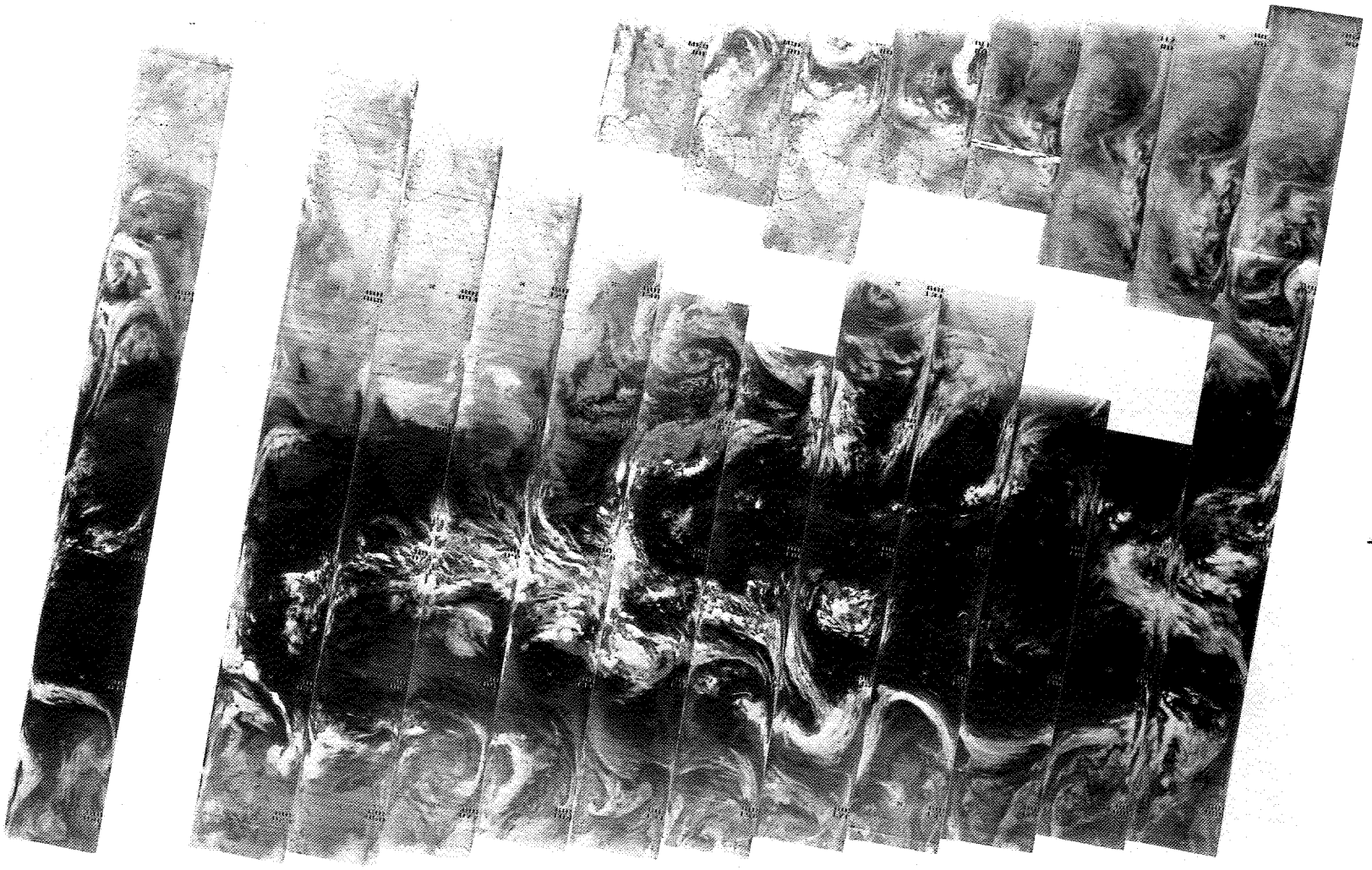

5311
5310
5309
5308
5307
5306
5305
5304
5303
5302
5301
5300
5299
10 JANUARY 1974
6.7 μm
min.
min.



11 JANUARY 1974

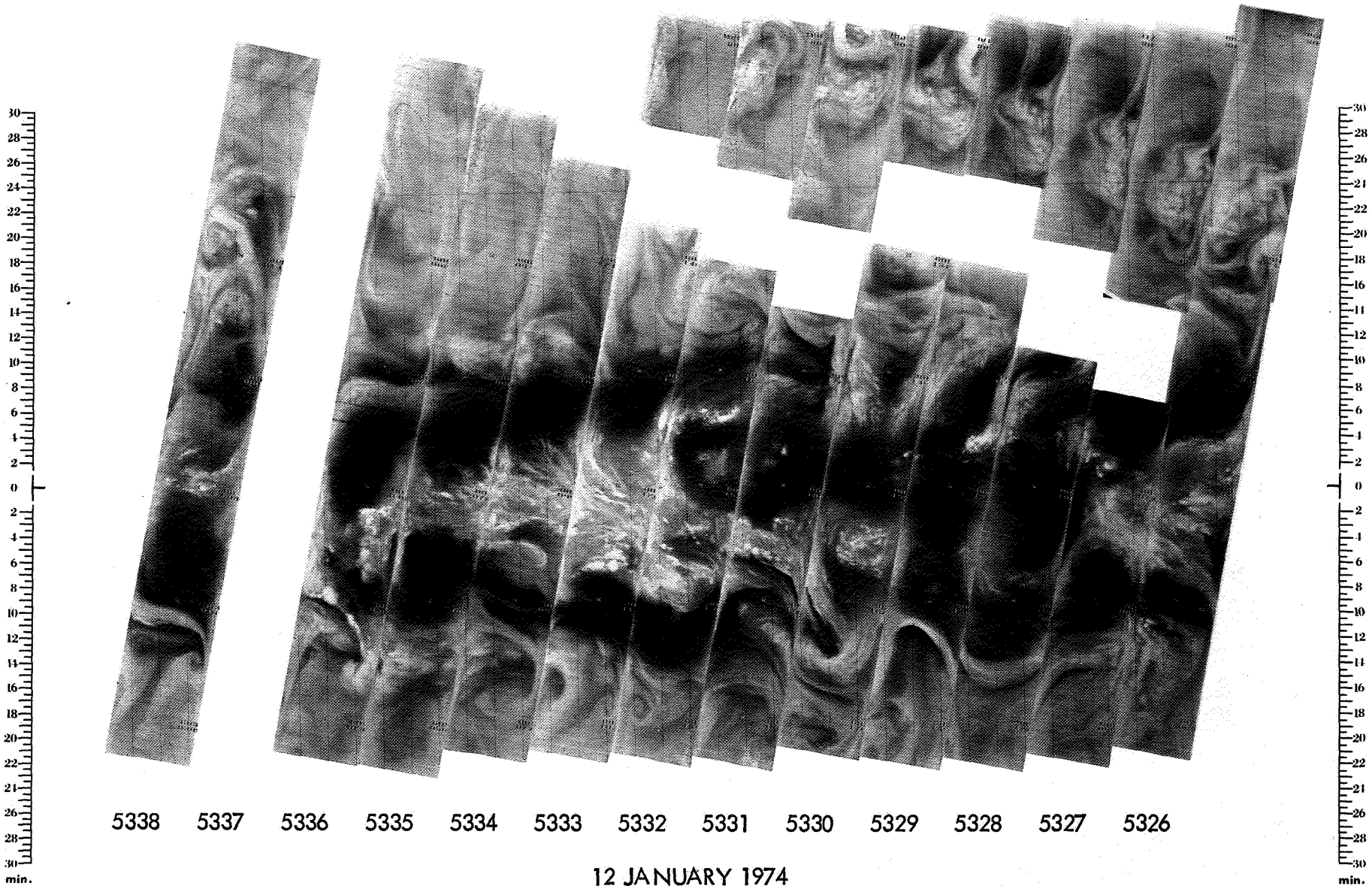
11.5 μm


5325
5324
5323
5322
5321
5320
5319
5318
5317
5316
5315
5314
5313
5312
11 JANUARY 1974
6.7 μm
min.
min.



12 JANUARY 1974

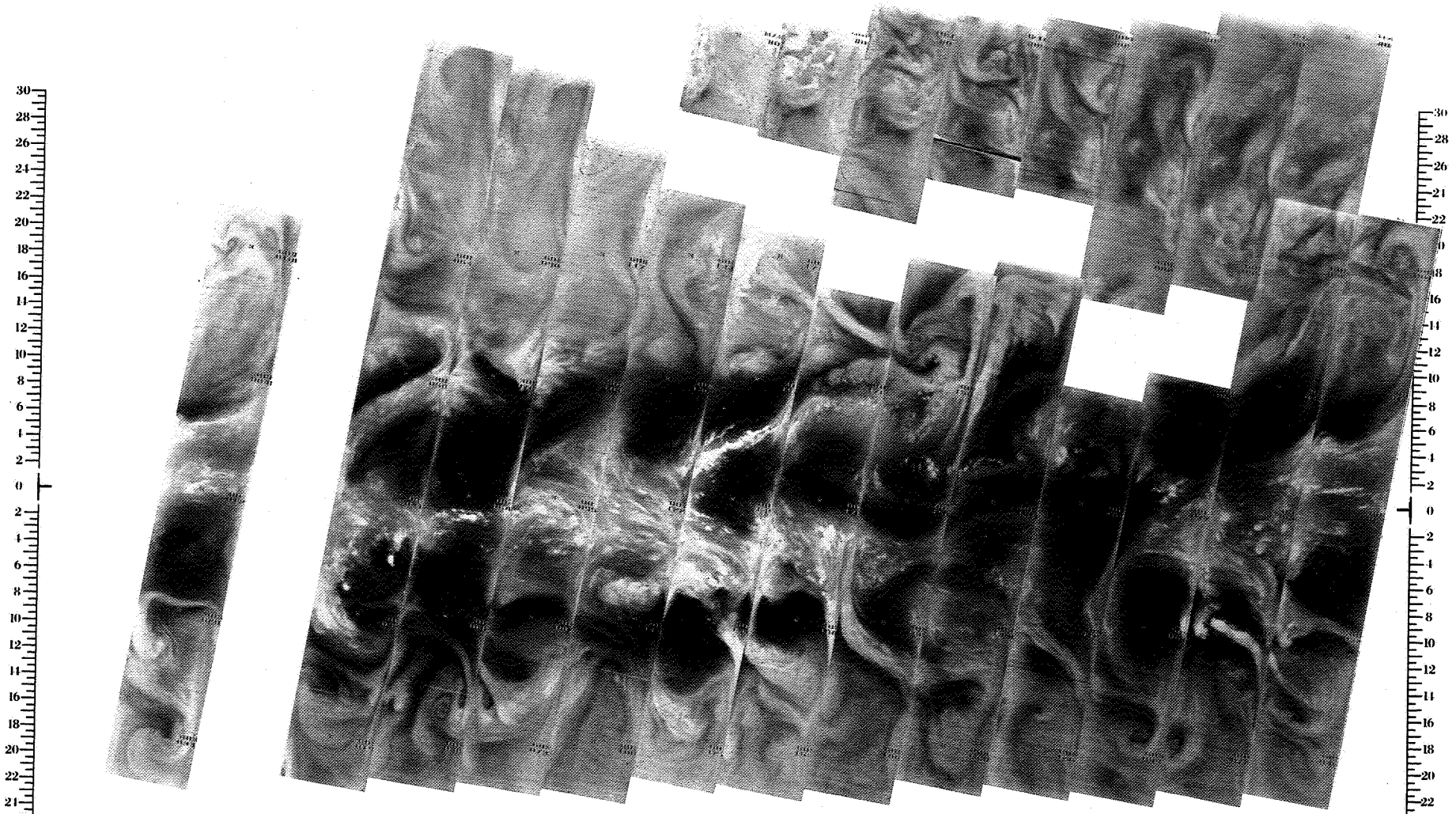
11.5 μm

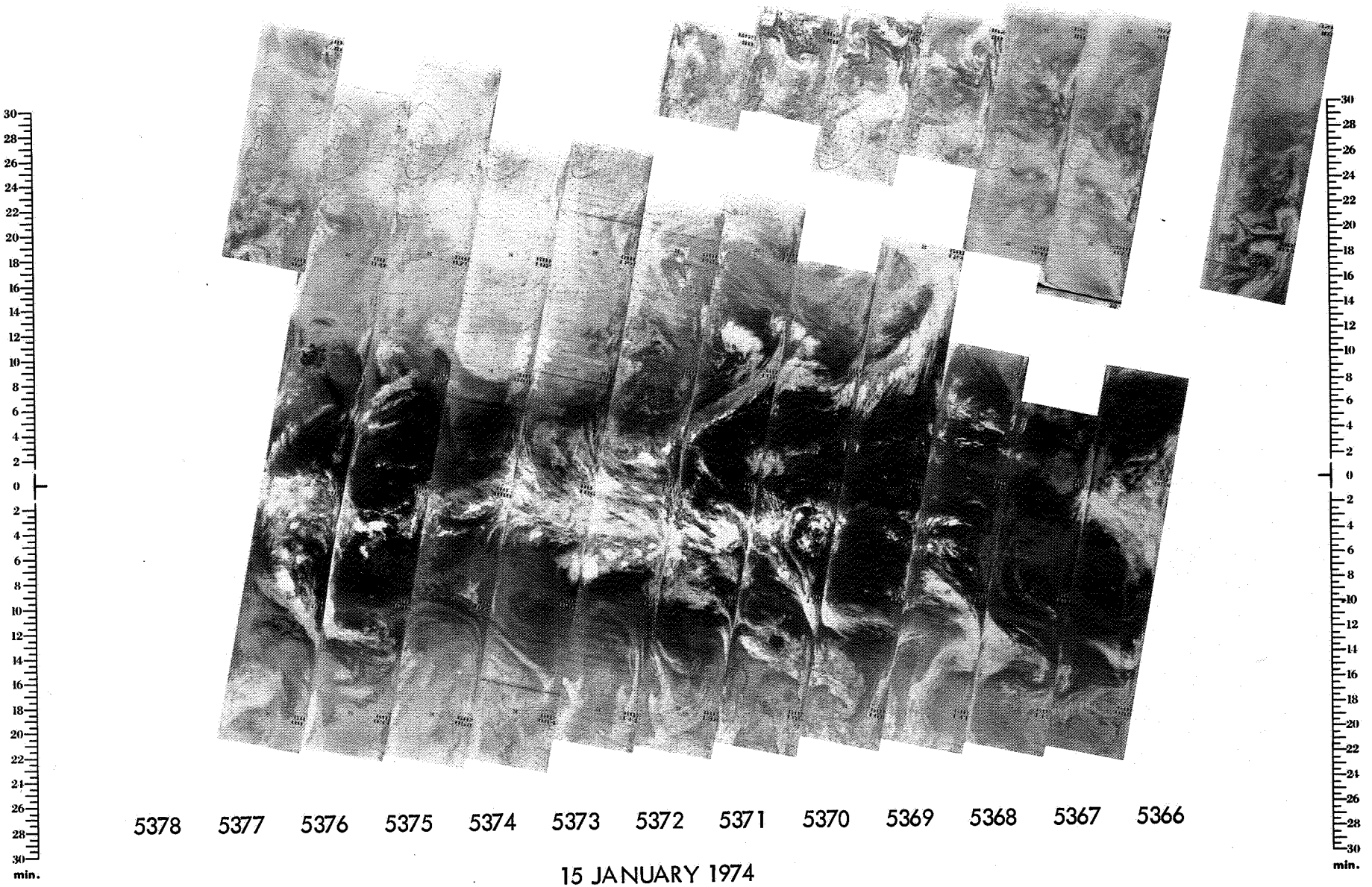

5338
5337
5336
5335
5334
5333
5332
5331
5330
5329
5328
5327
5326
12 JANUARY 1974
6.7 μm
min.
min.

5351 5350 5349 5348 5347 5346 5345 5344 5343 5342 5341 5340 5339
13 JANUARY 1974
11.5 μm

5339
5340
5341
5342
5343
5344
5345
5346
5347
5348
5349
5350
5351
13 JANUARY 1974
6.7 μm
min.

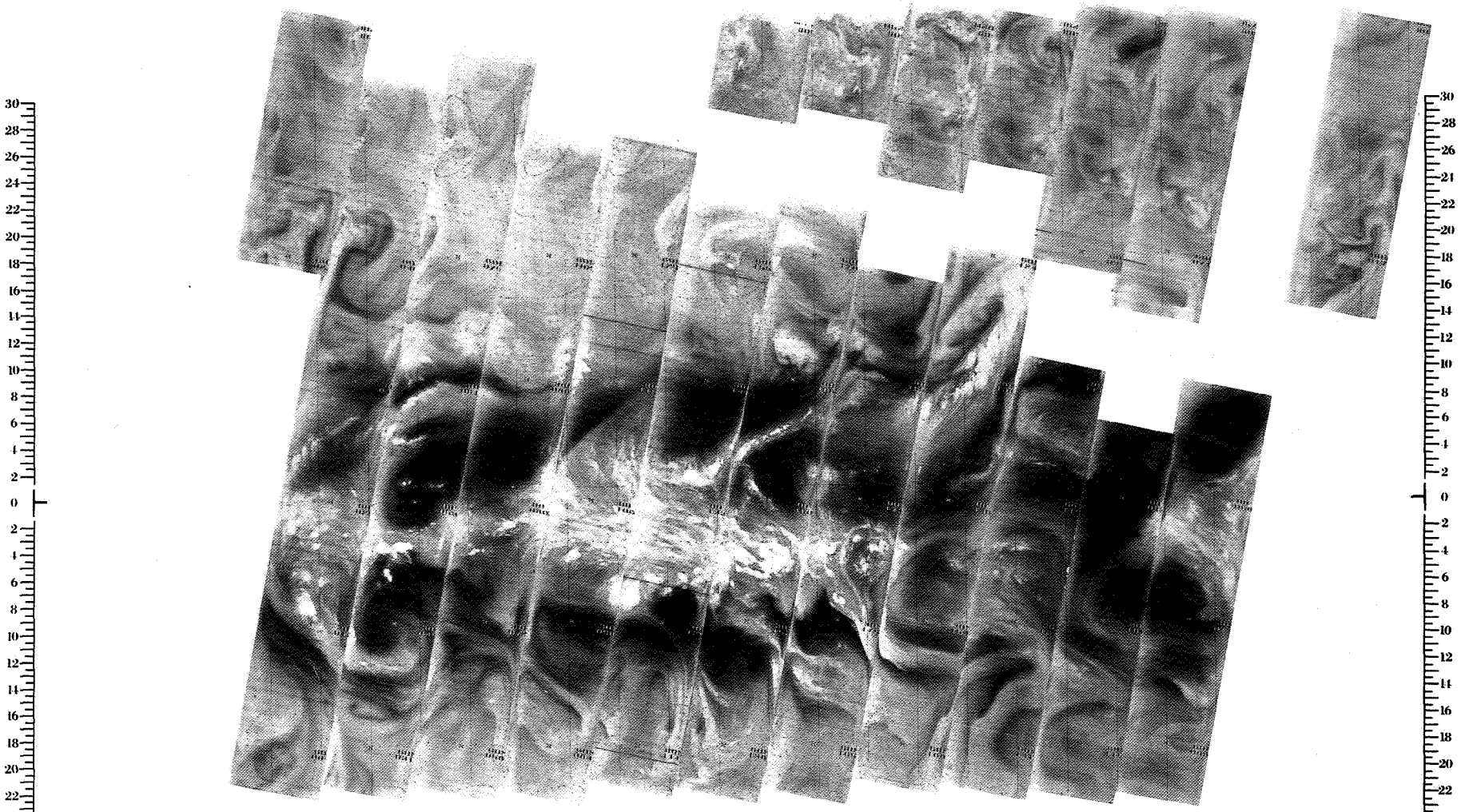
5352
5353
5354
5355
5356
5357
5358
5359
5360
5361
5362
5363
5364
5365
14 JANUARY 1974
11.5 μm

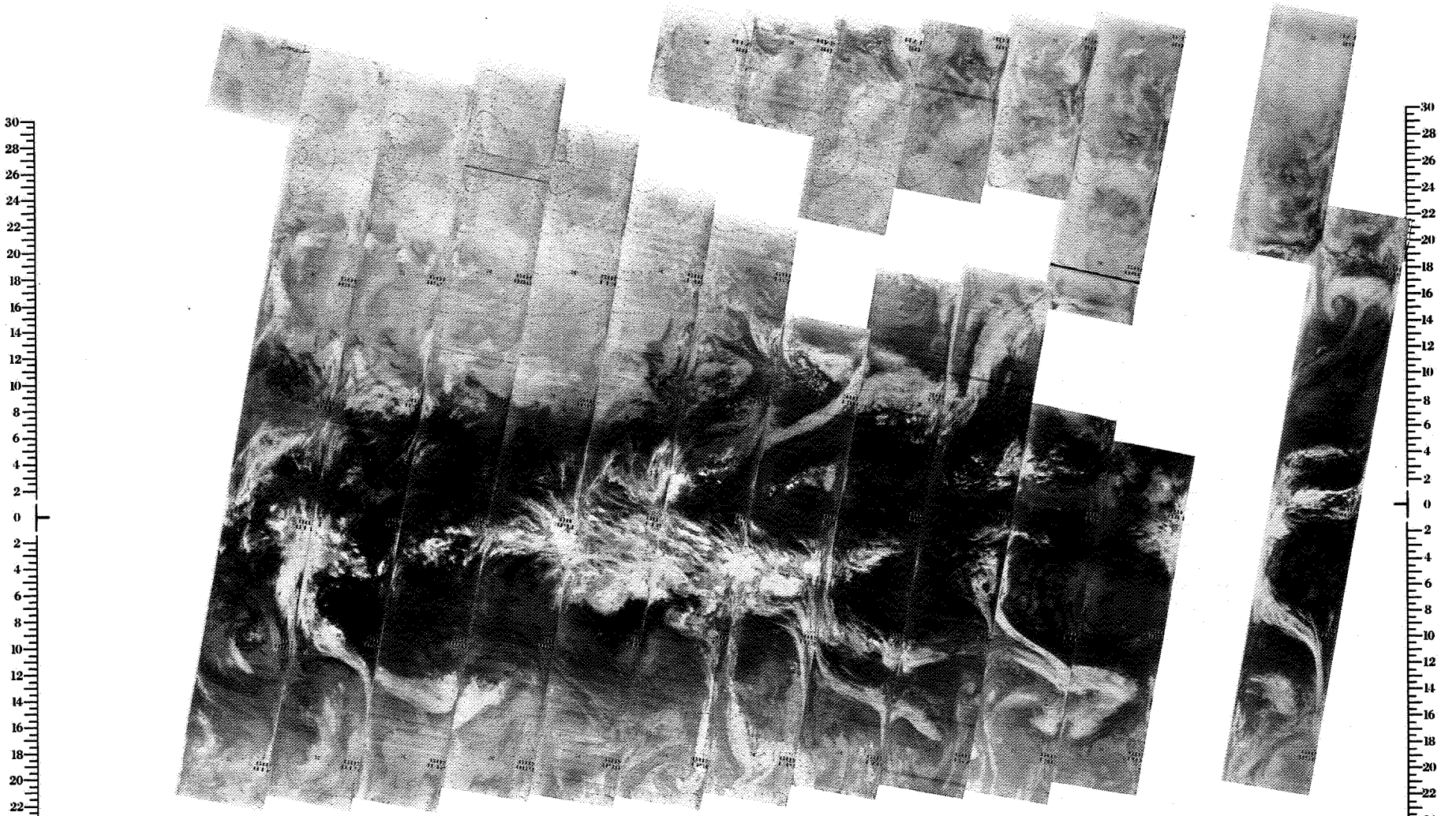

5365
5364
5363
5362
5361
5360
5359
5358
5357
5356
5355
5354
5353
5352
14 JANUARY 1974
6.7 μm
min.
min.



15 JANUARY 1974

11.5 μm

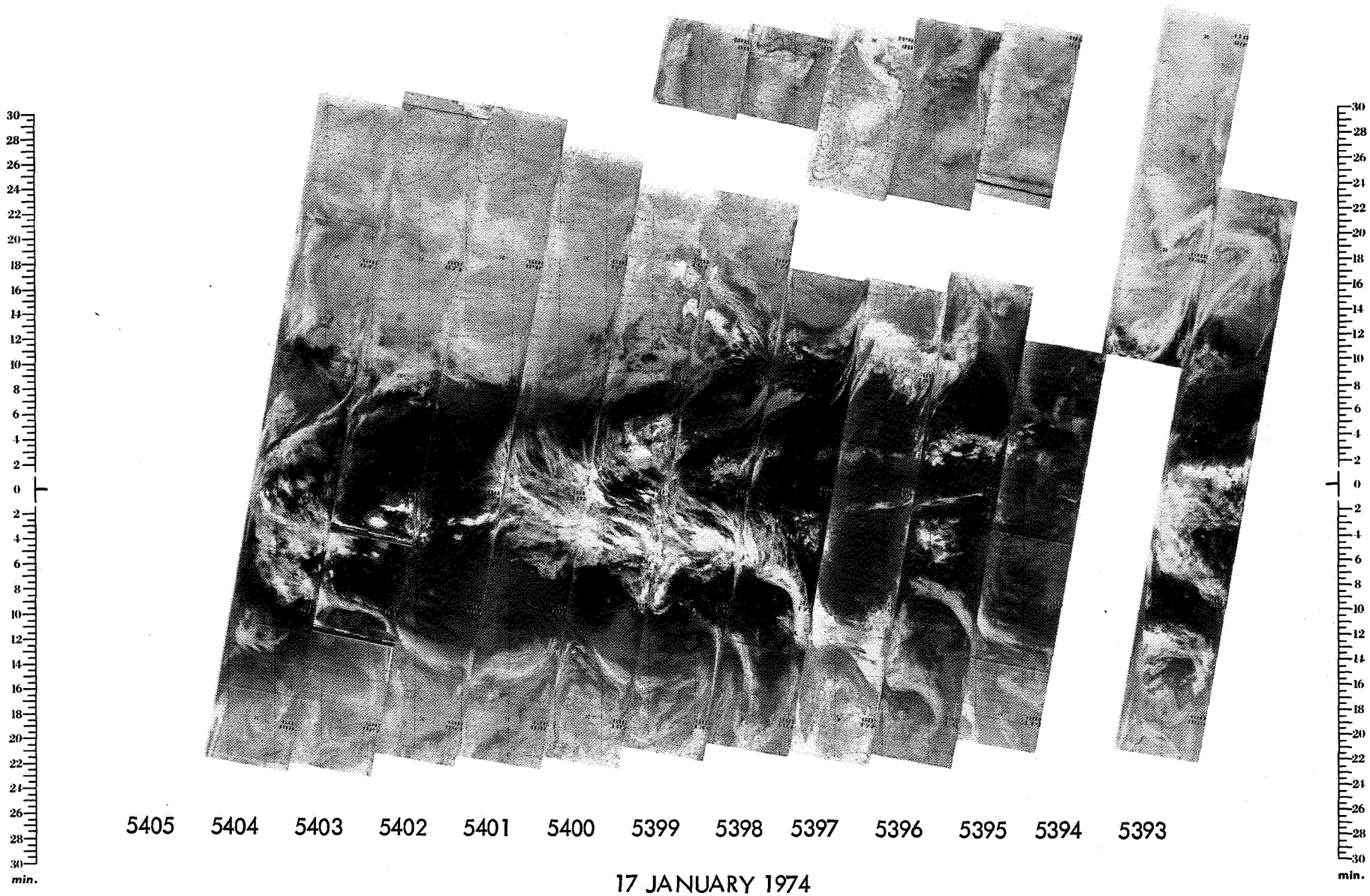

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
5378 5377 5376 5375 5374 5373 5372 5371 5370 5369 5368 5367 5366
15 JANUARY 1974
6.7 μm



16 JANUARY 1974

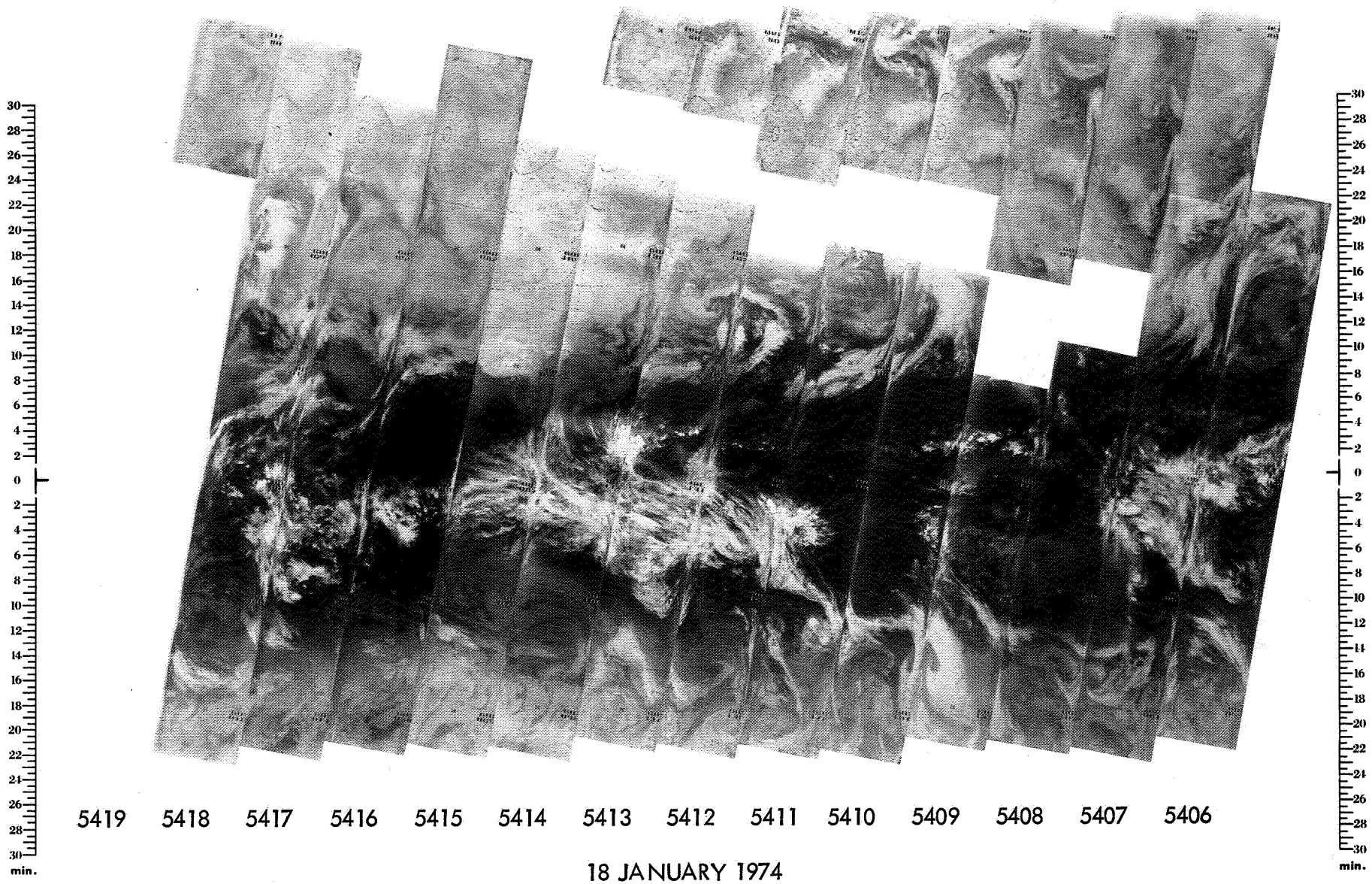
11.5 μm

min.
5379
5380
5381
5382
5383
5384
5385
5386
5387
5388
5389
5390
5391
5392
16 JANUARY 1974
6.7 μm
min.



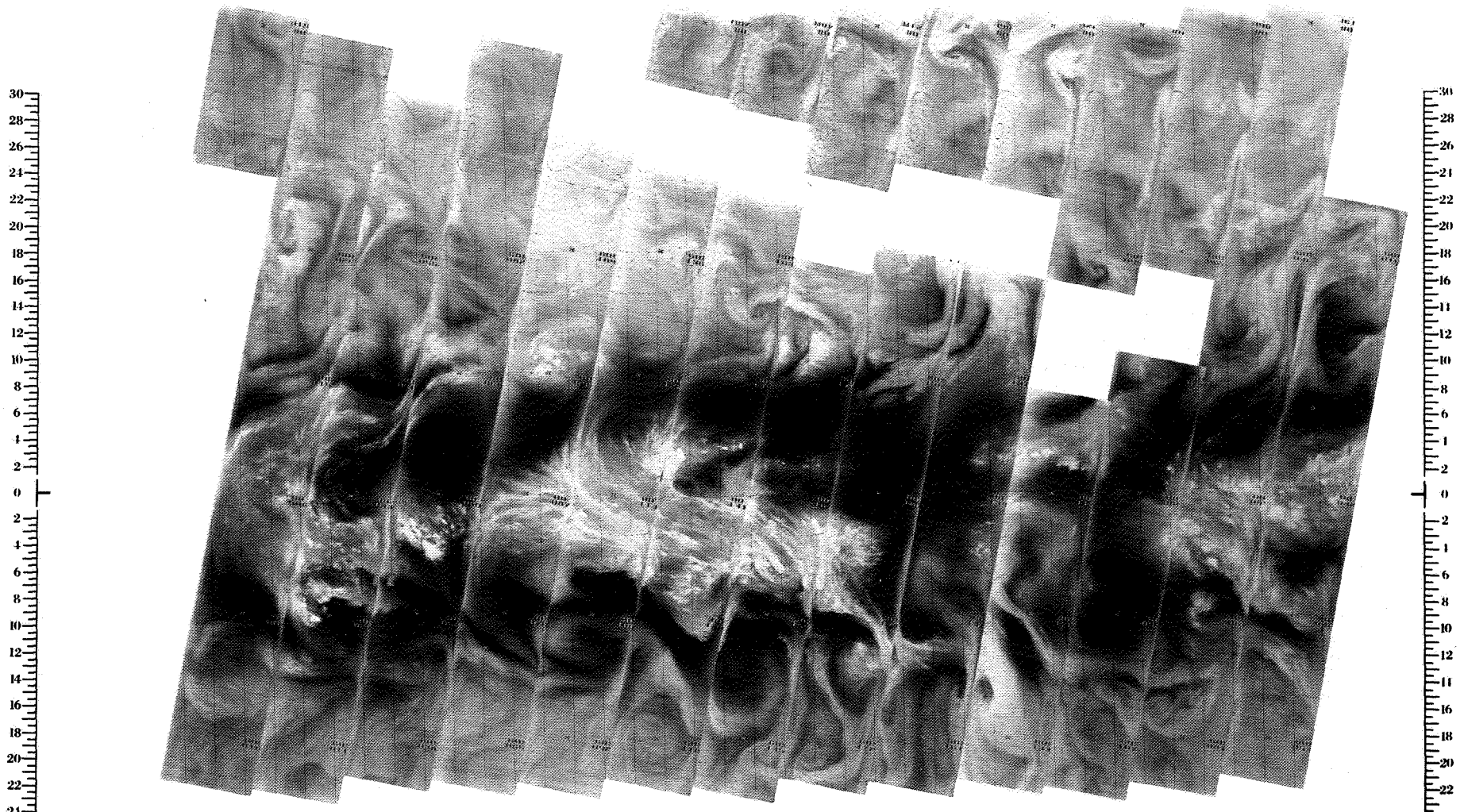
17 JANUARY 1974
11.5 μm

5393
5394
5395
5396
5397
5398
5399
5400
5401
5402
5403
5404
5405
17 JANUARY 1974
6.7 μm



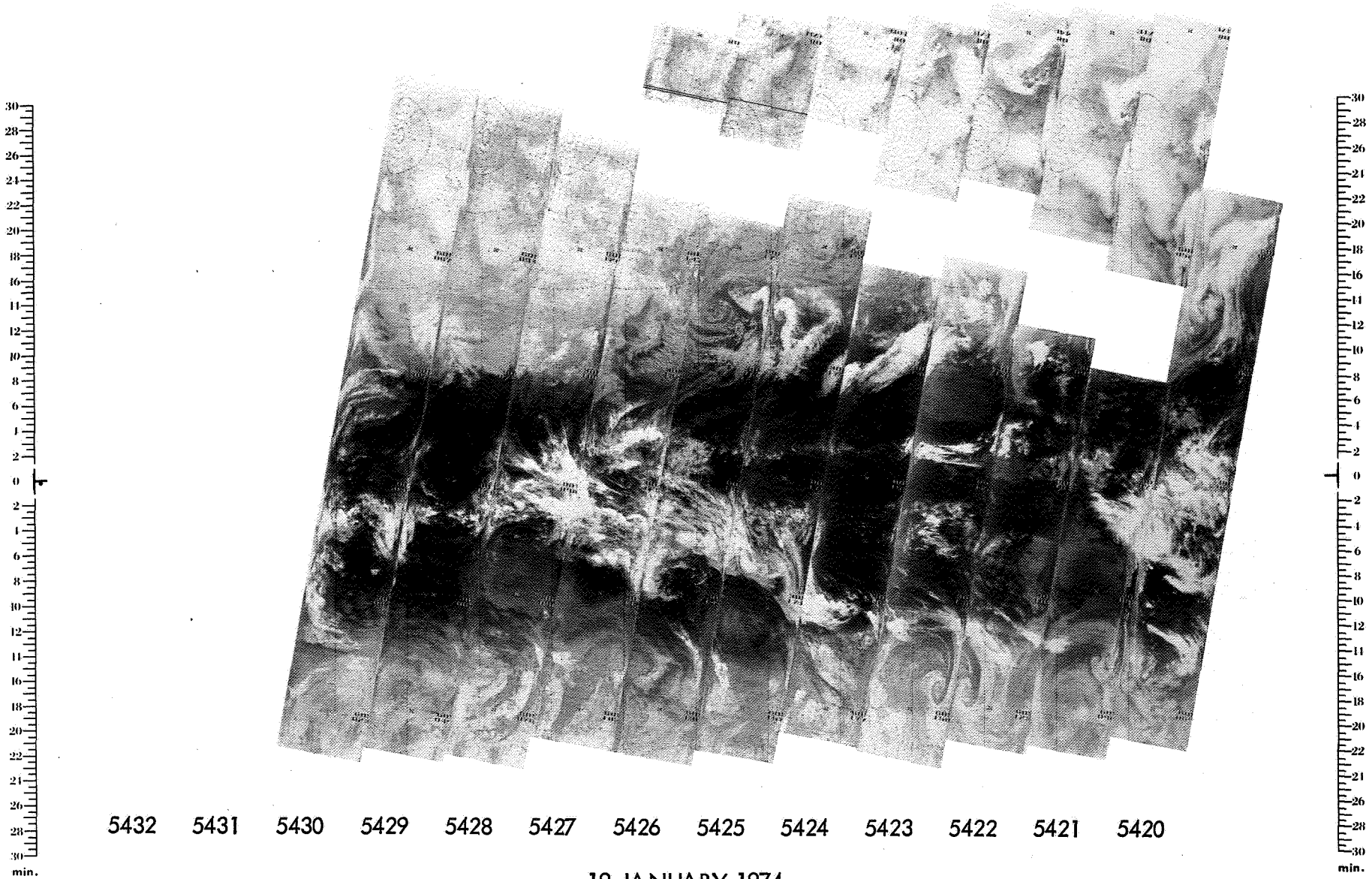
18 JANUARY 1974

11.5 μm



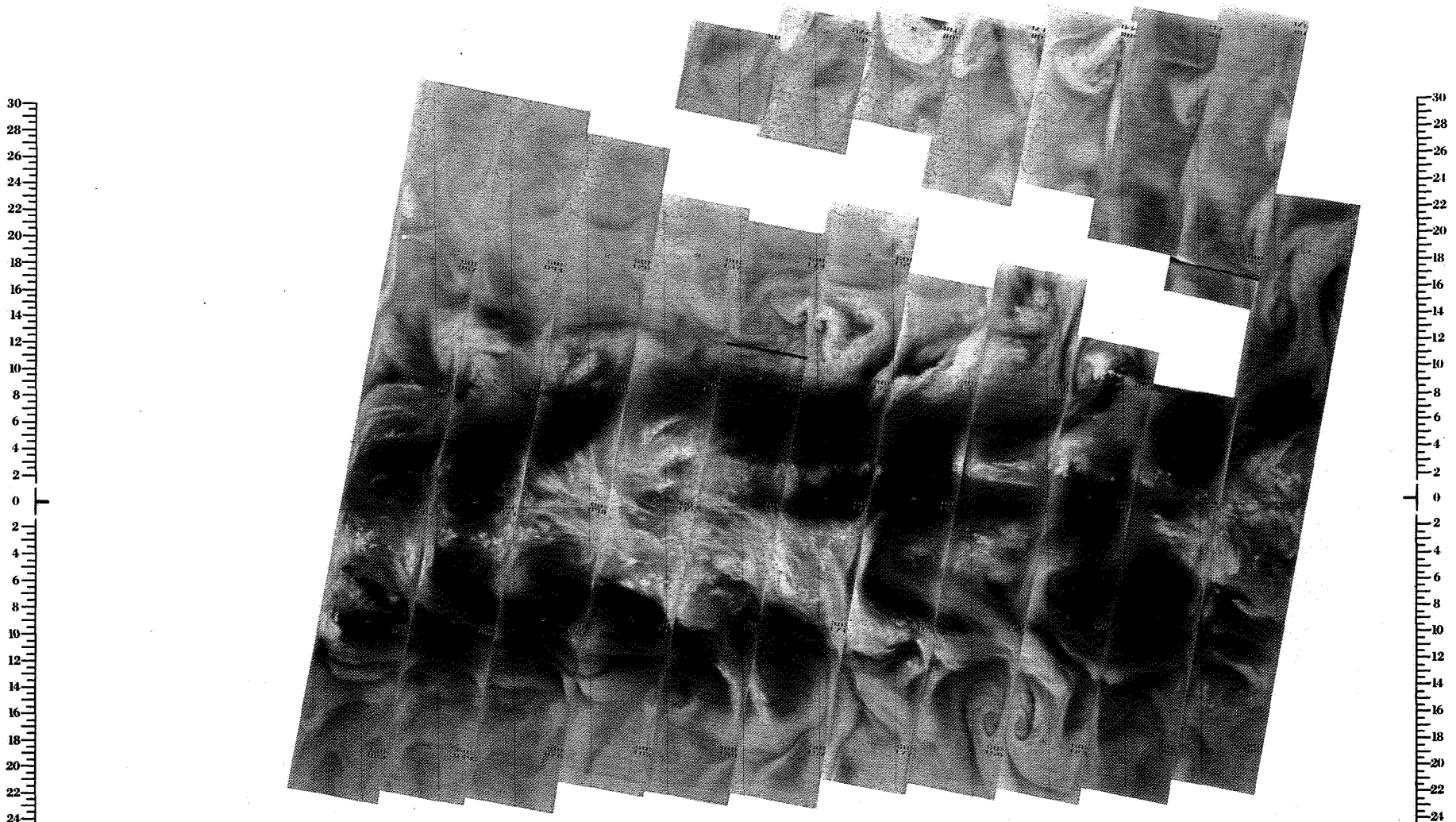
18 JANUARY 1974

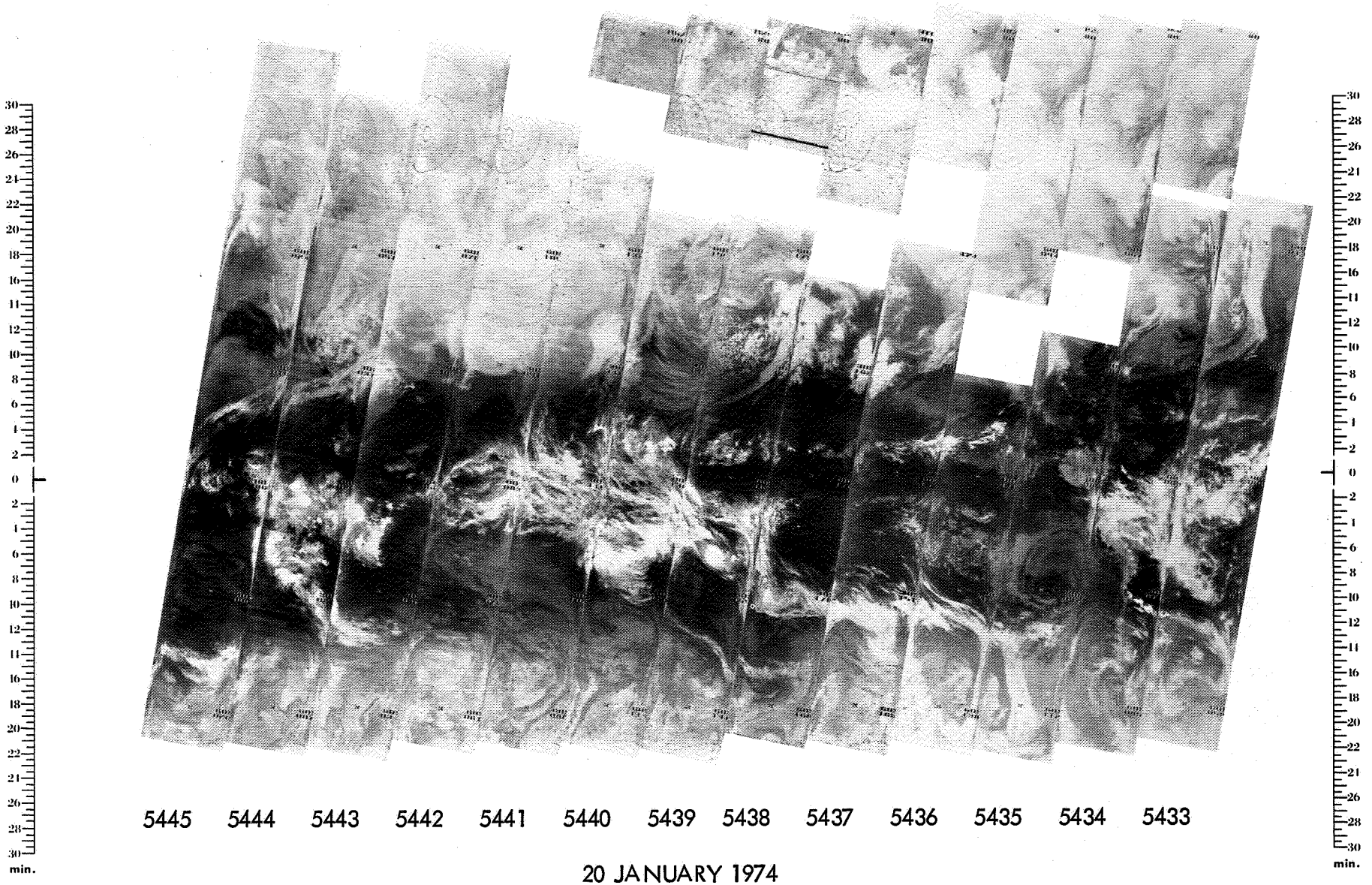
6.7 μm



19 JANUARY 1974

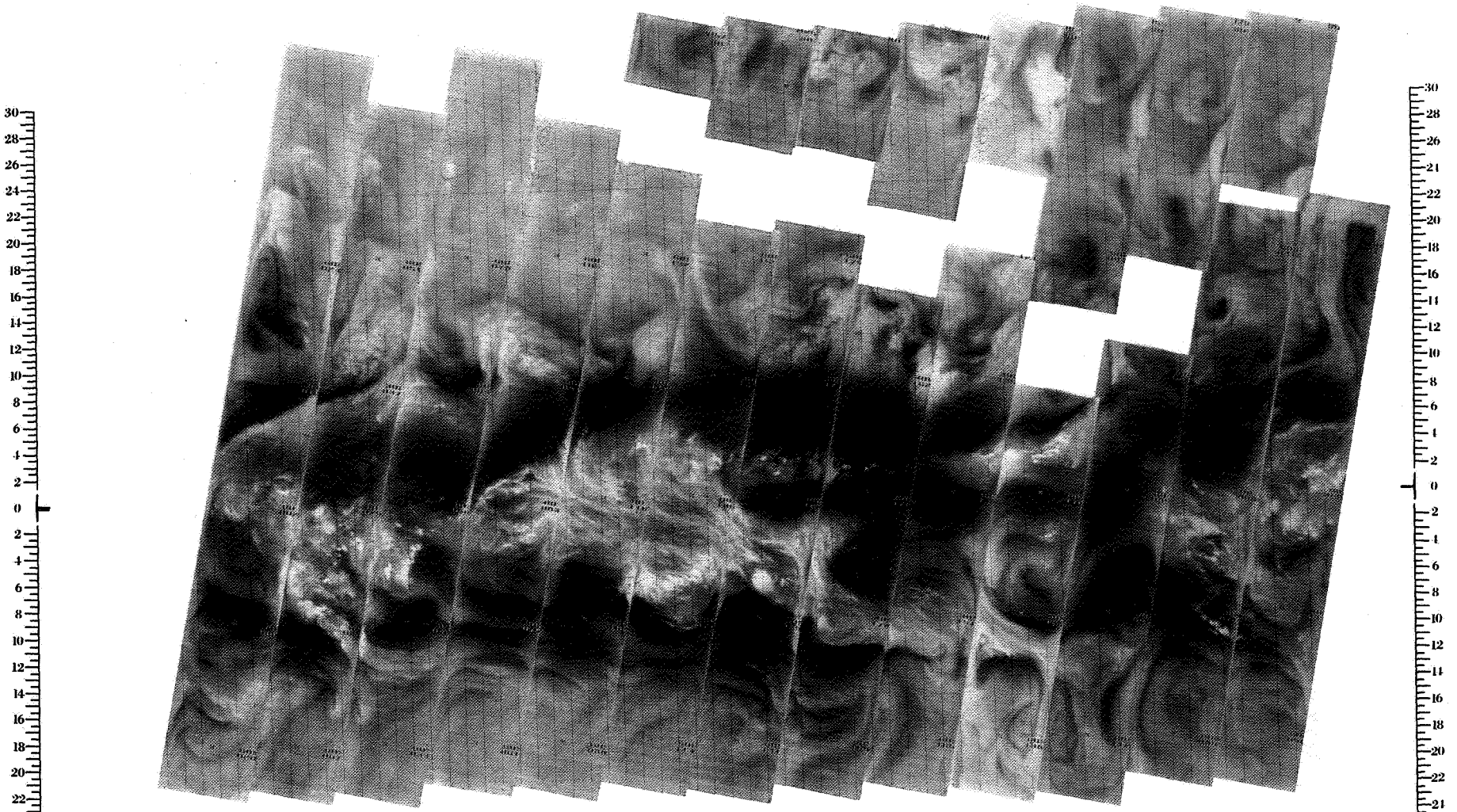
11.5 μm

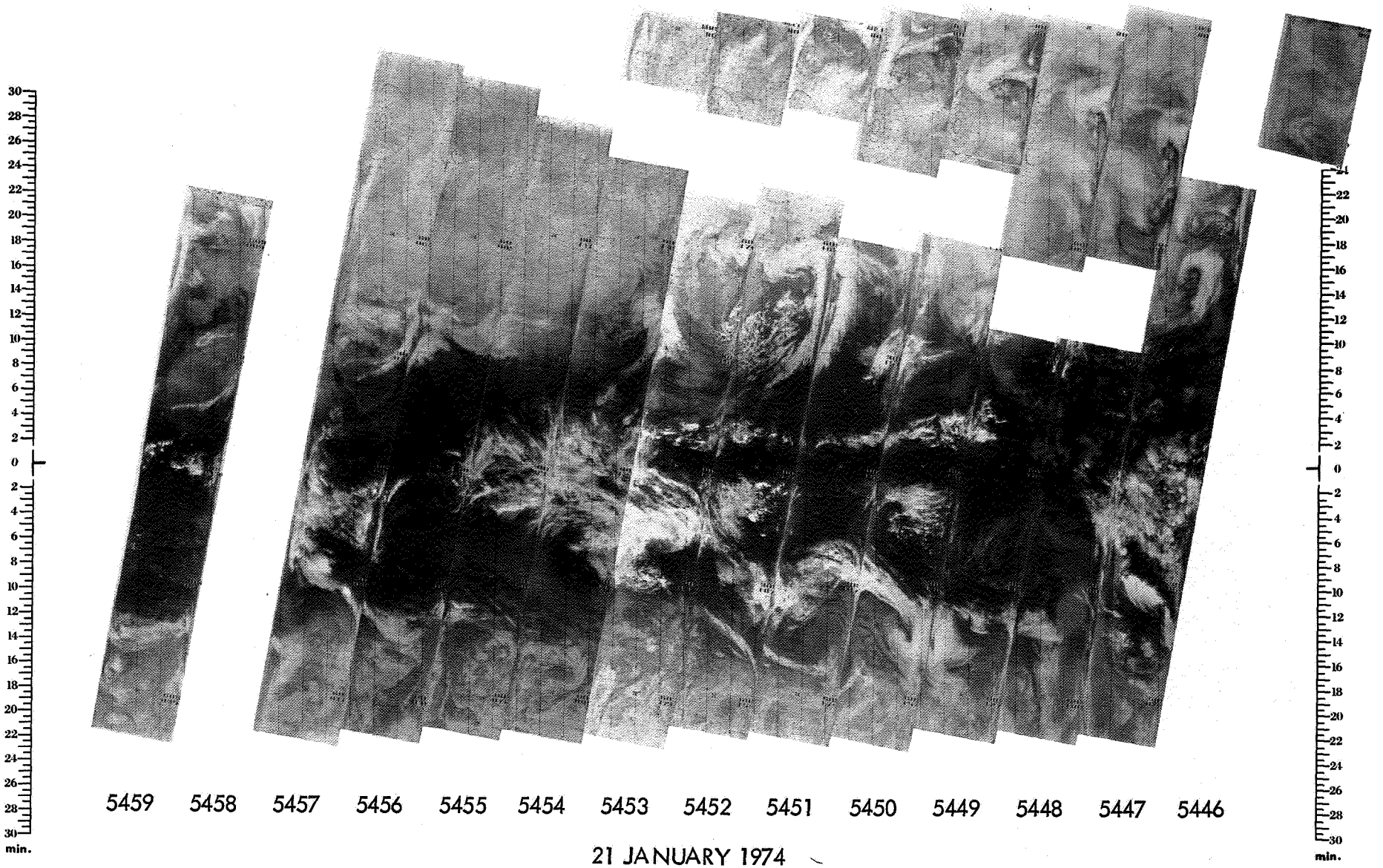

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
5432 5431 5430 5429 5428 5427 5426 5425 5424 5423 5422 5421 5420
19 JANUARY 1974
6.7 μm

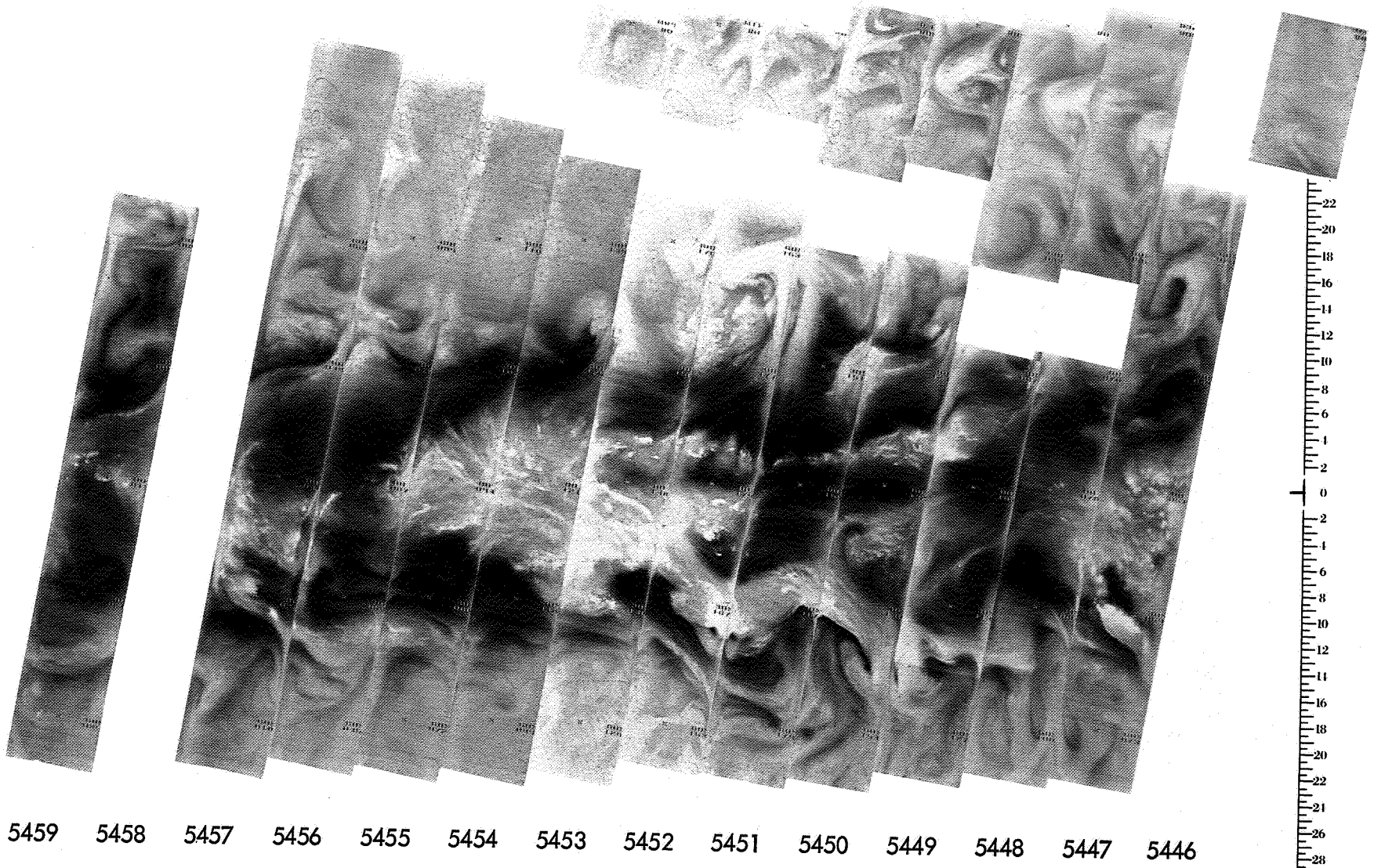


20 JANUARY 1974

11.5 μm


5445 5444 5443 5442 5441 5440 5439 5438 5437 5436 5435 5434 5433
20 JANUARY 1974
6.7 μm
min.
min.


5459
5458
5457
5456
5455
5454
5453
5452
5451
5450
5449
5448
5447
5446
21 JANUARY 1974
11.5 μm
min.
min.



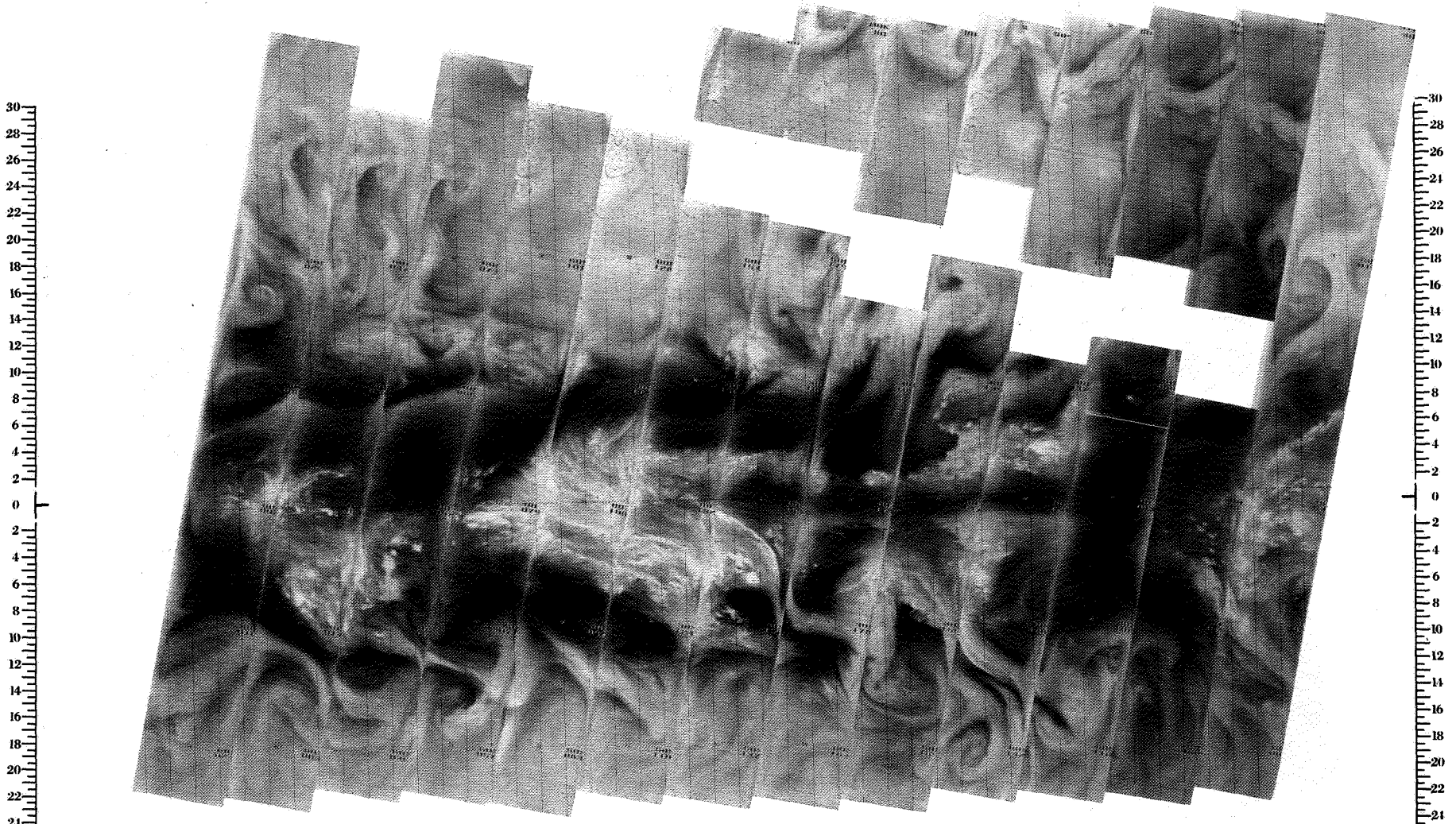
21 JANUARY 1974

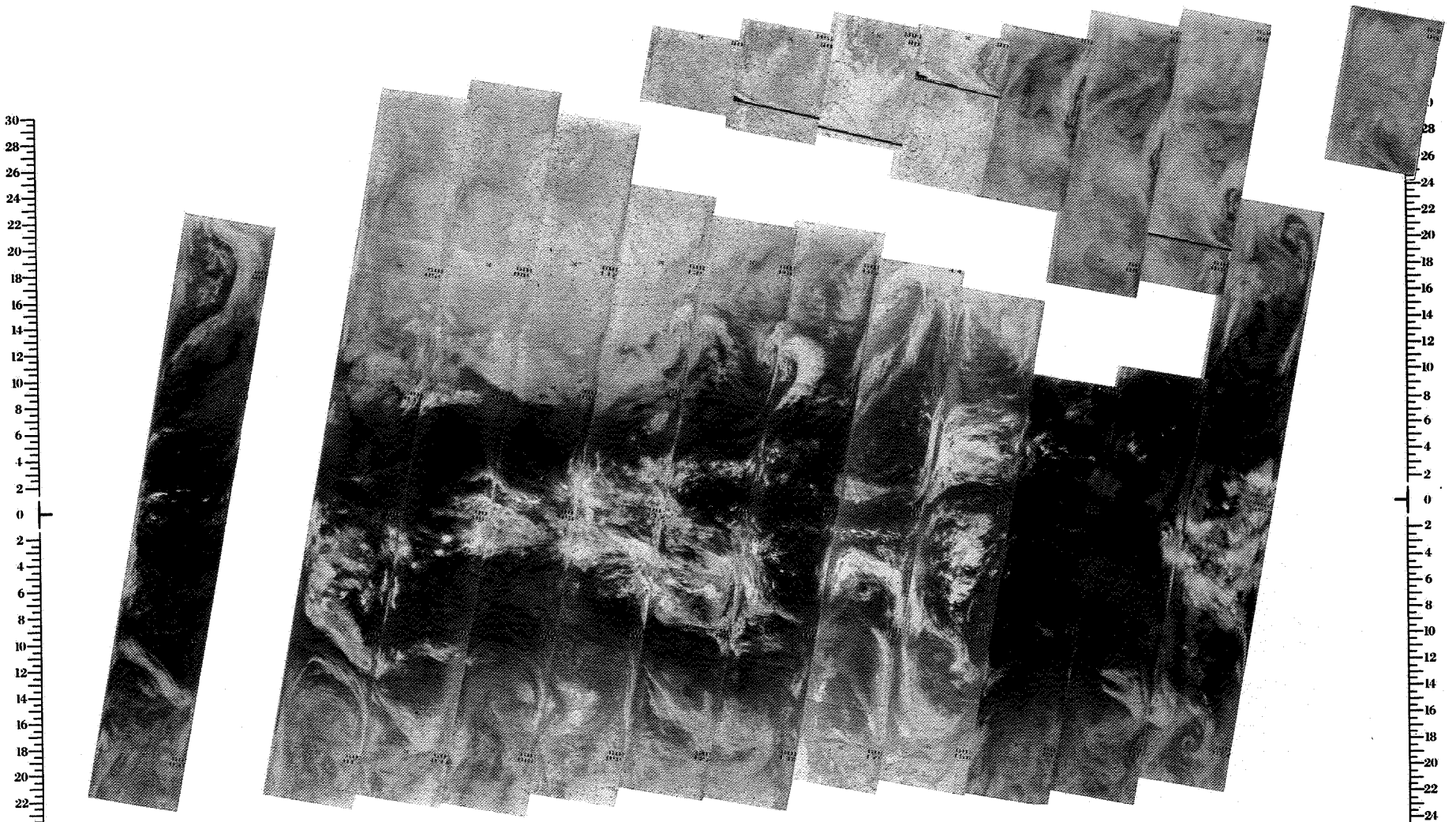
6.7 μm



22 JANUARY 1974

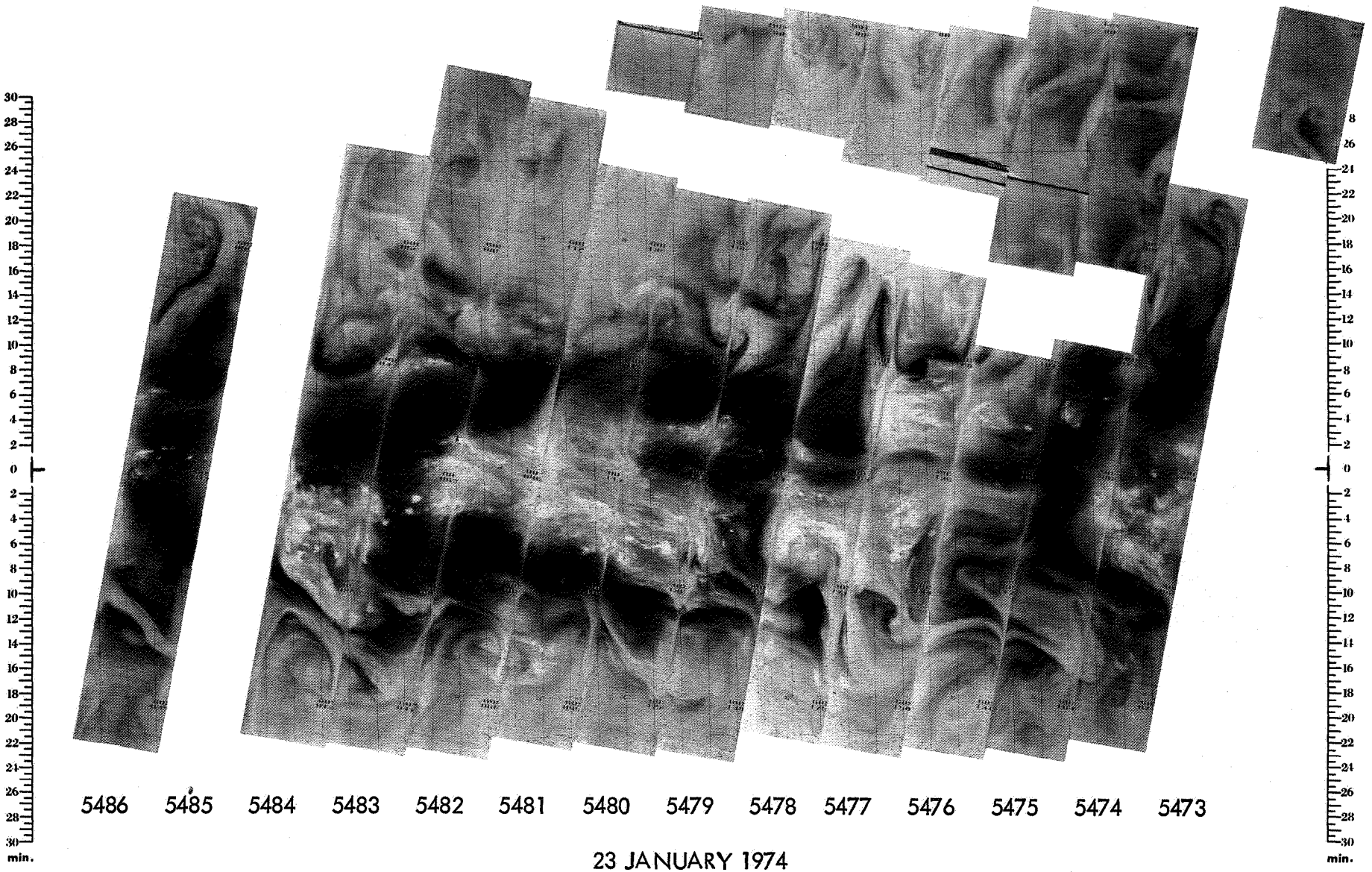
11.5 μm

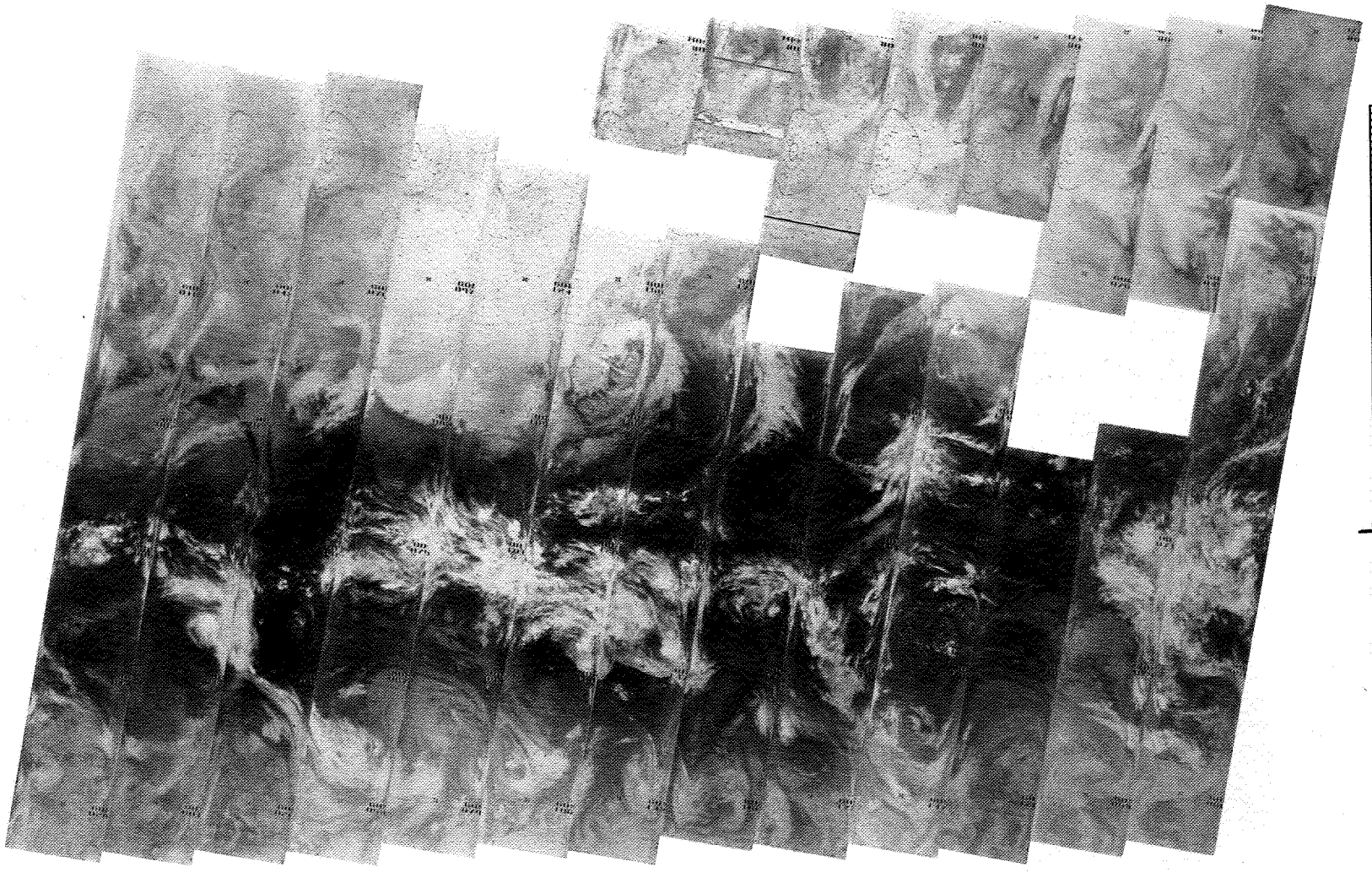

5472 5471 5470 5469 5468 5467 5466 5465 5464 5463 5462 5461 5460
22 JANUARY 1974
6.7 μm
min.
min.



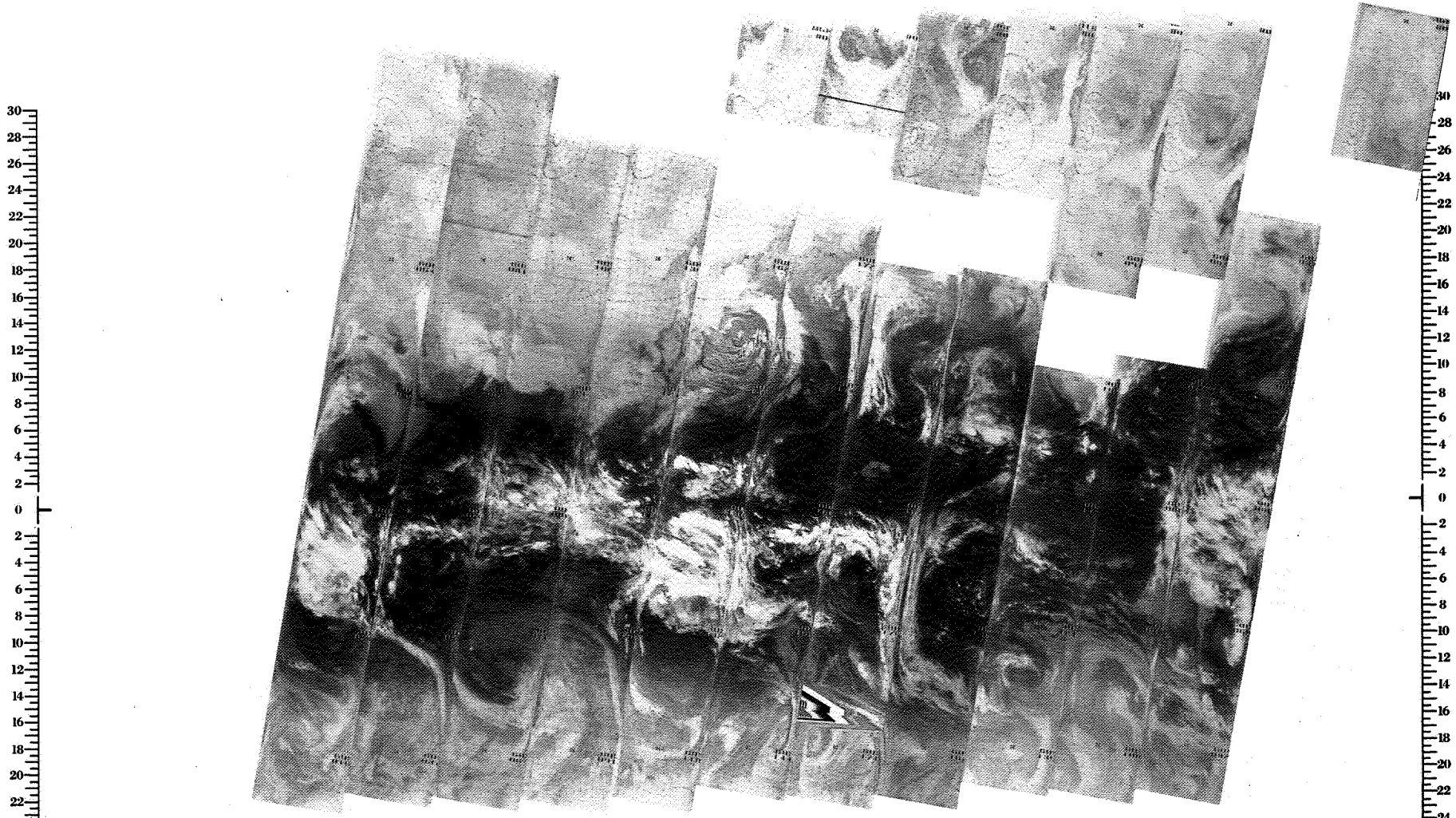
23 JANUARY 1974

11.5 μm


5486
5485
5484
5483
5482
5481
5480
5479
5478
5477
5476
5475
5474
5473
min.
min.
23 JANUARY 1974
6.7 μm


5499 5498 5497 5496 5495 5494 5493 5492 5491 5490 5489 5488 5487
24 JANUARY 1974
11.5 μm
min.
min.

5487
5488
5489
5490
5491
5492
5493
5494
5495
5496
5497
5498
5499
24 JANUARY 1974
6.7 μm
min.

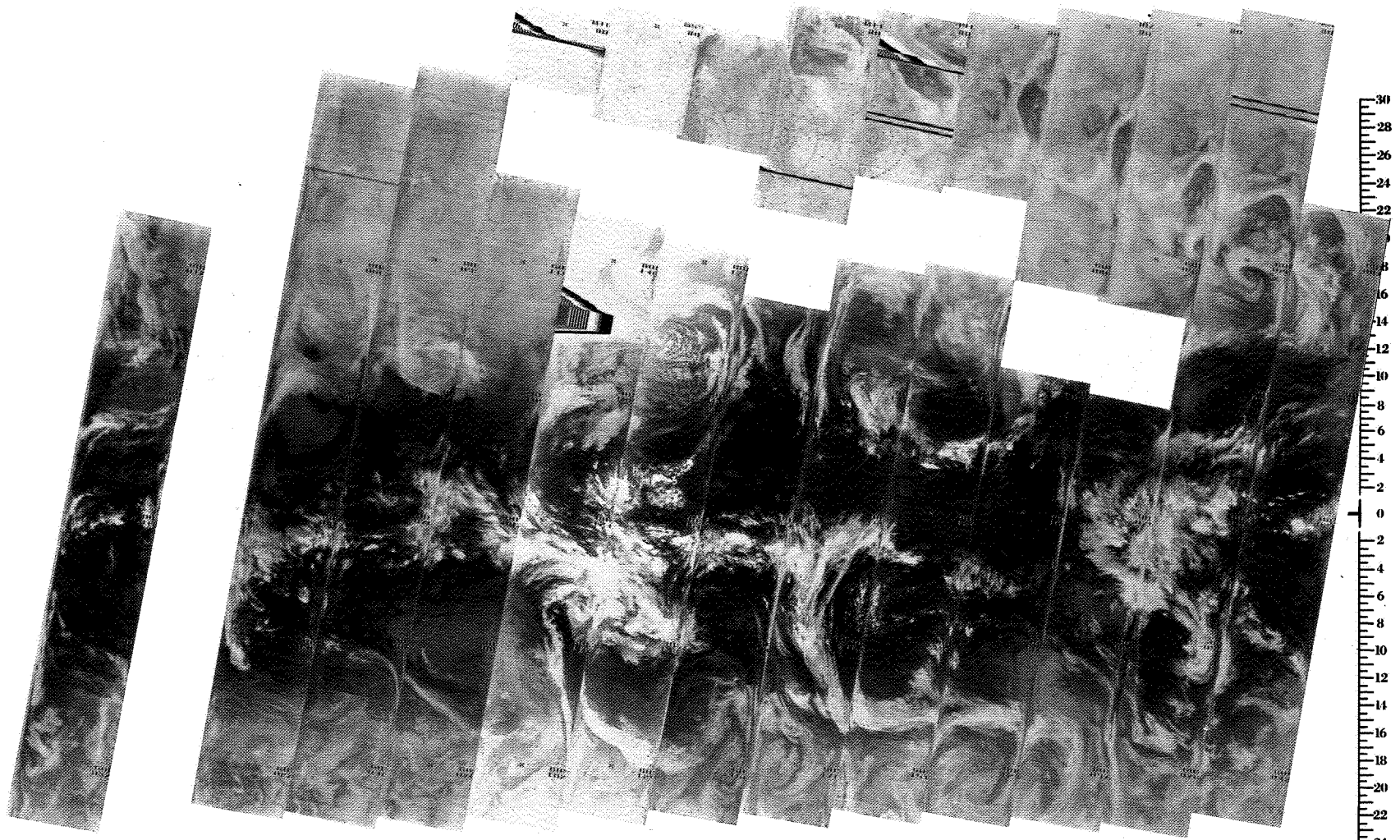


25 JANUARY 1974

11.5 μm

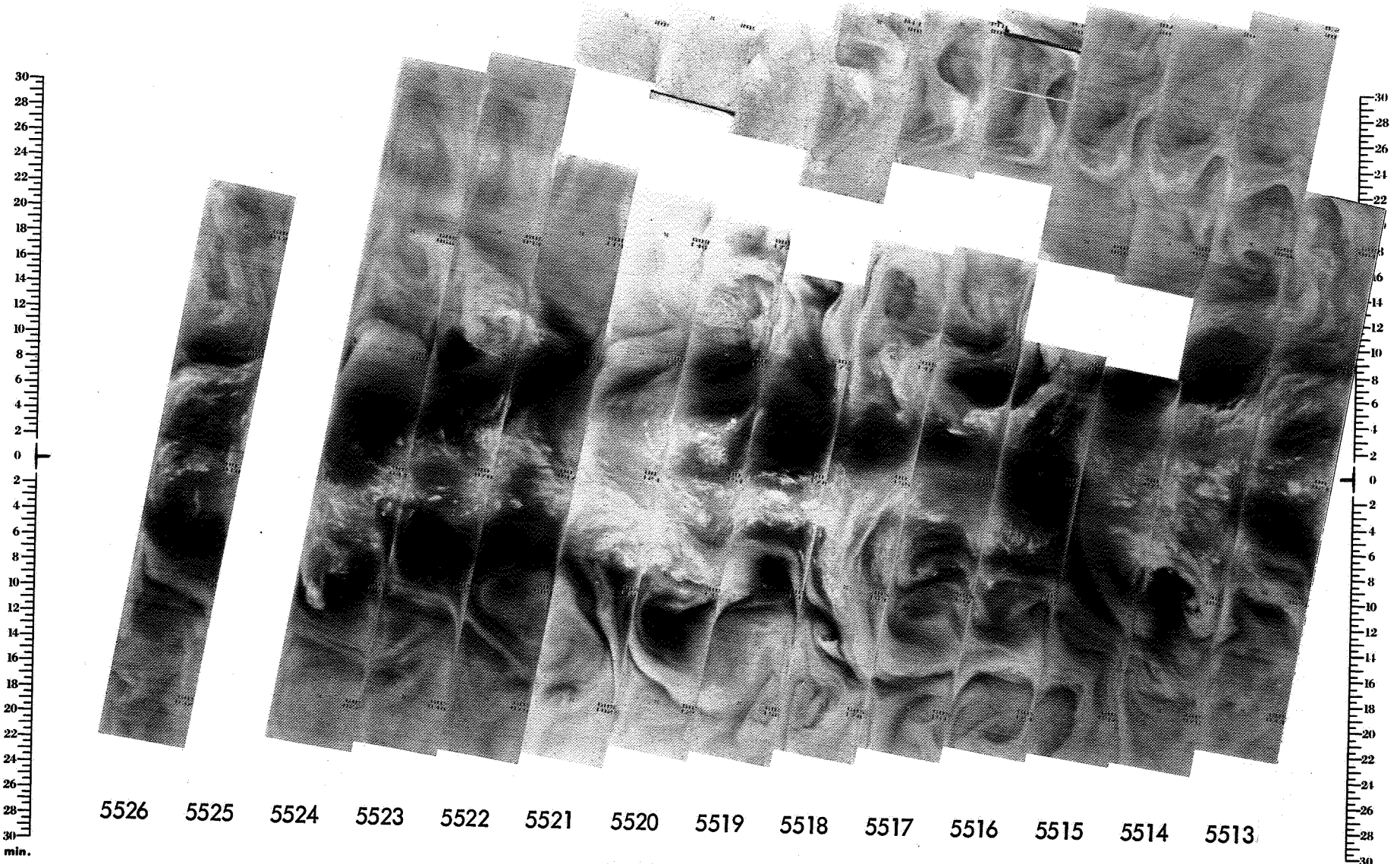
25 JANUARY 1974

6.7 μm



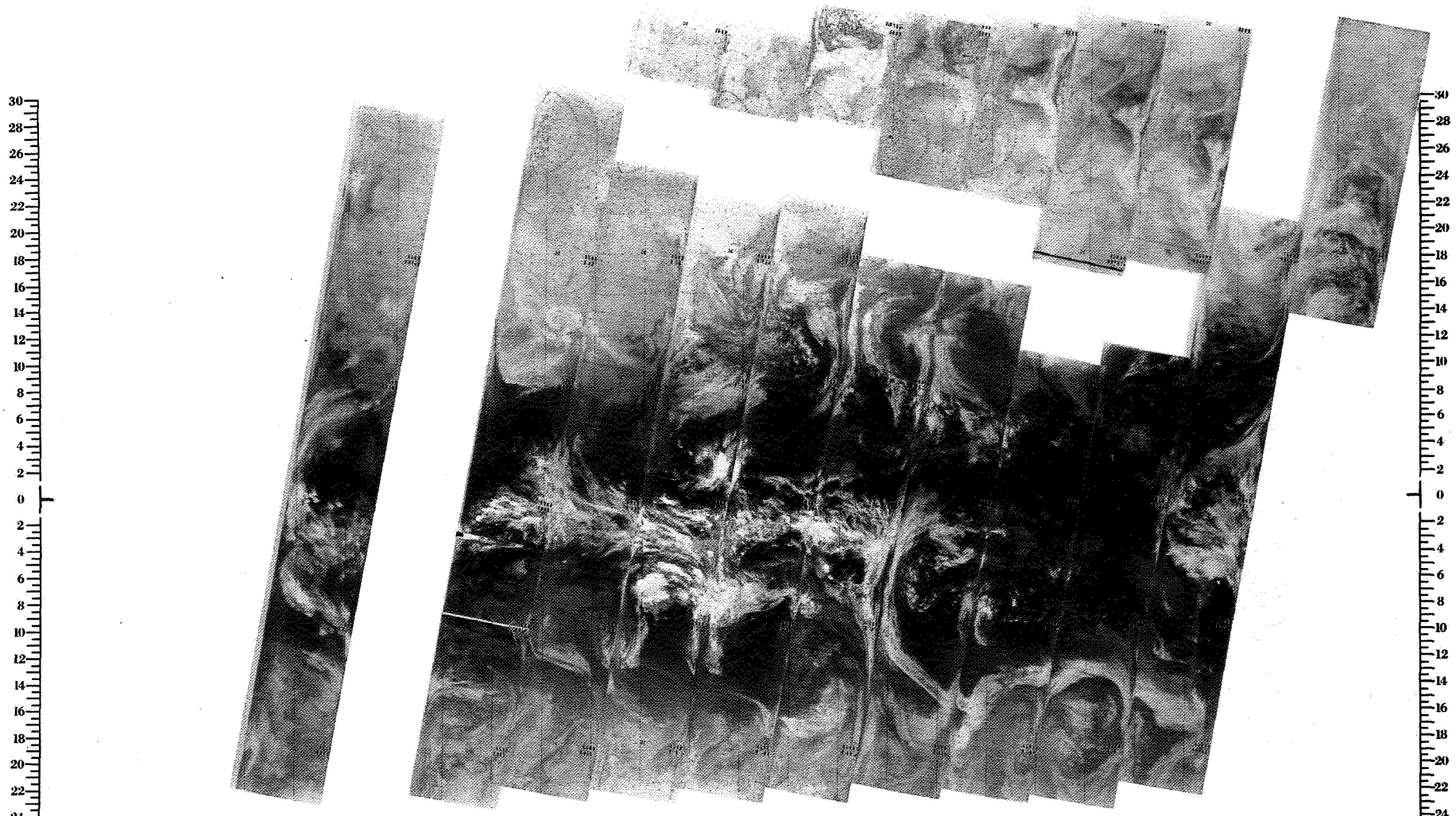
26 JANUARY 1974

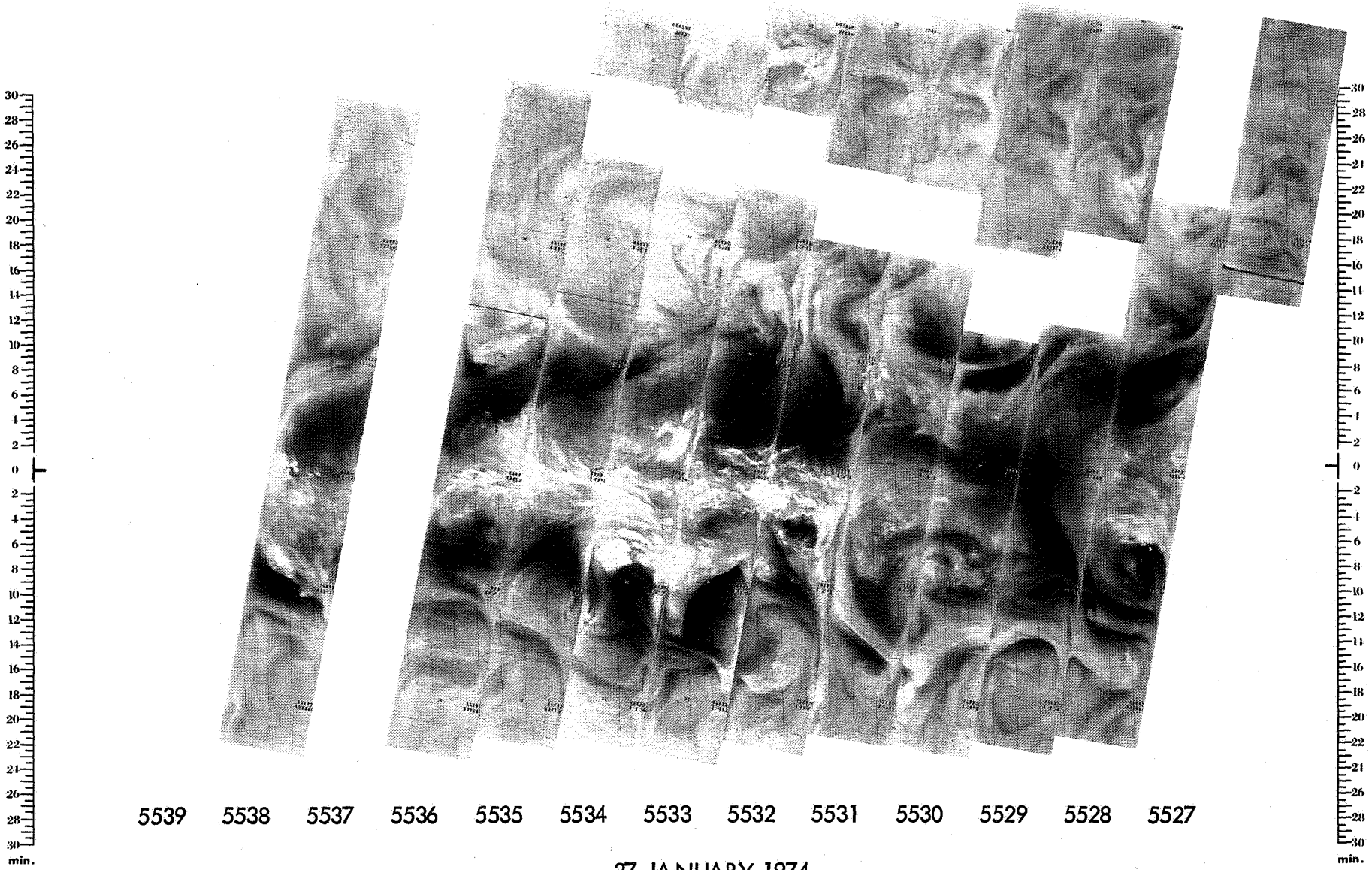
11.5 μm



26 JANUARY 1974

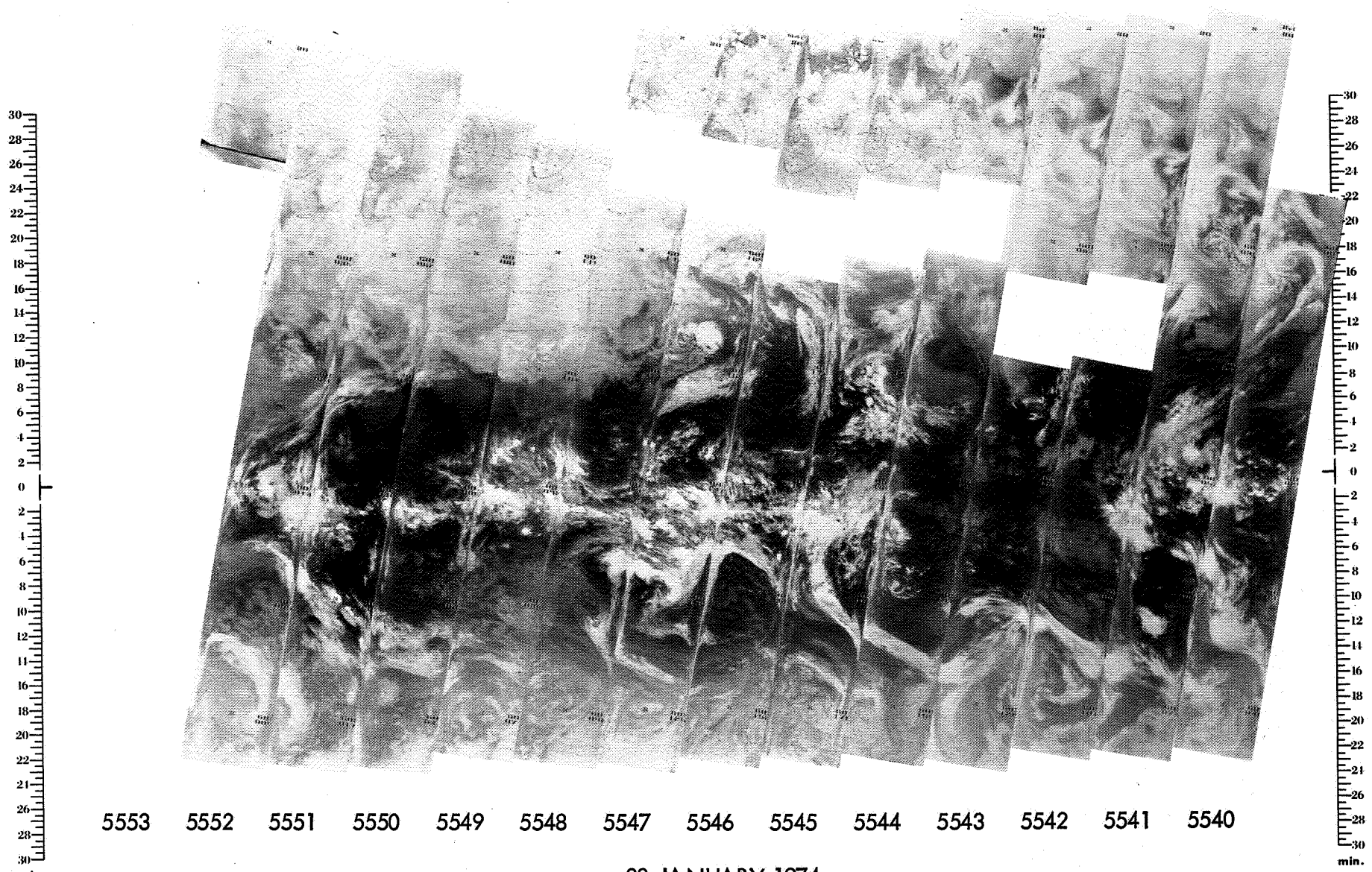
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
5539 5538 5537 5536 5535 5534 5533 5532 5531 5530 5529 5528 5527
27 JANUARY 1974
11.5 μm



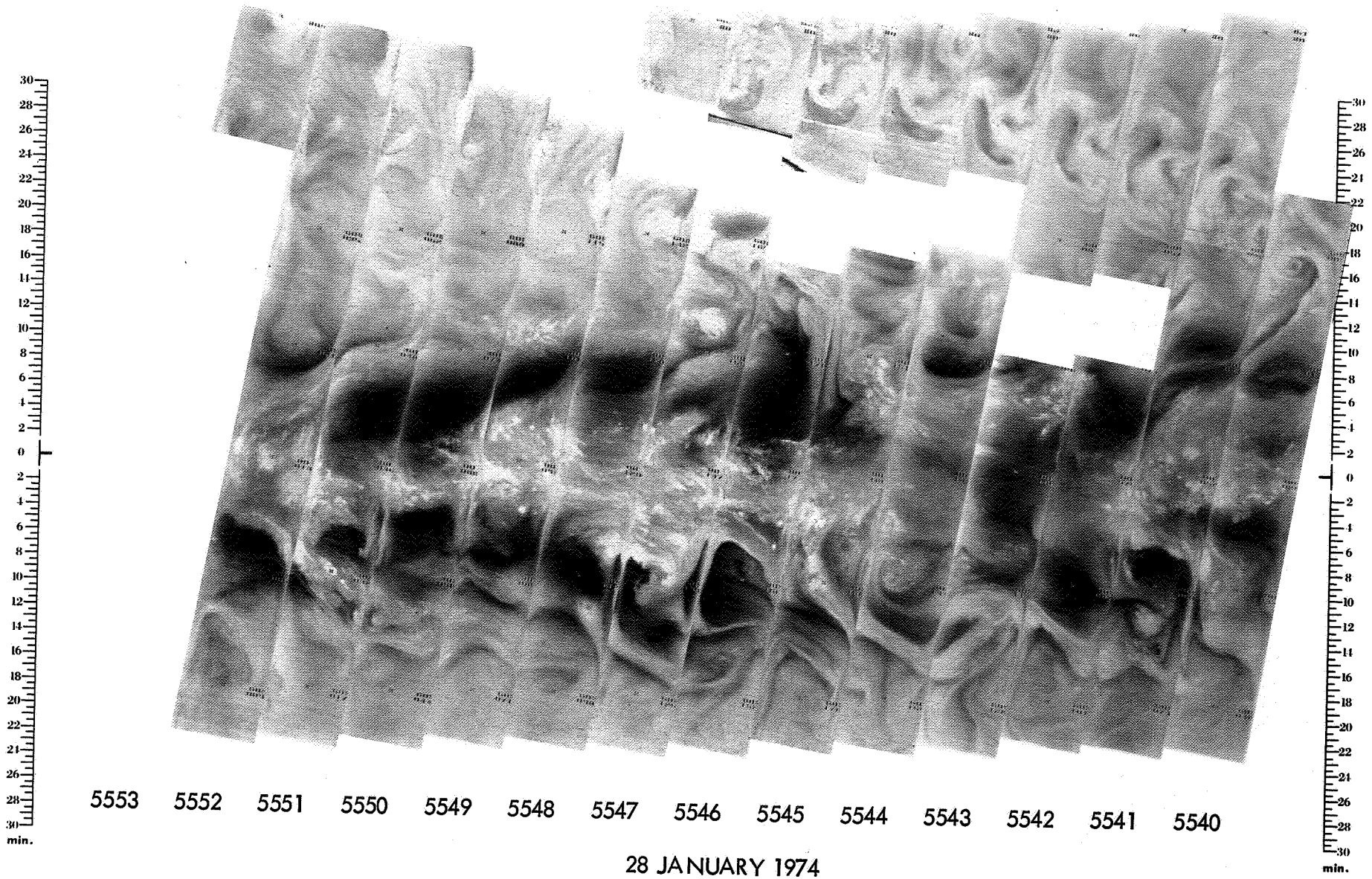
27 JANUARY 1974

6.7 μm



28 JANUARY 1974

11.5 μm



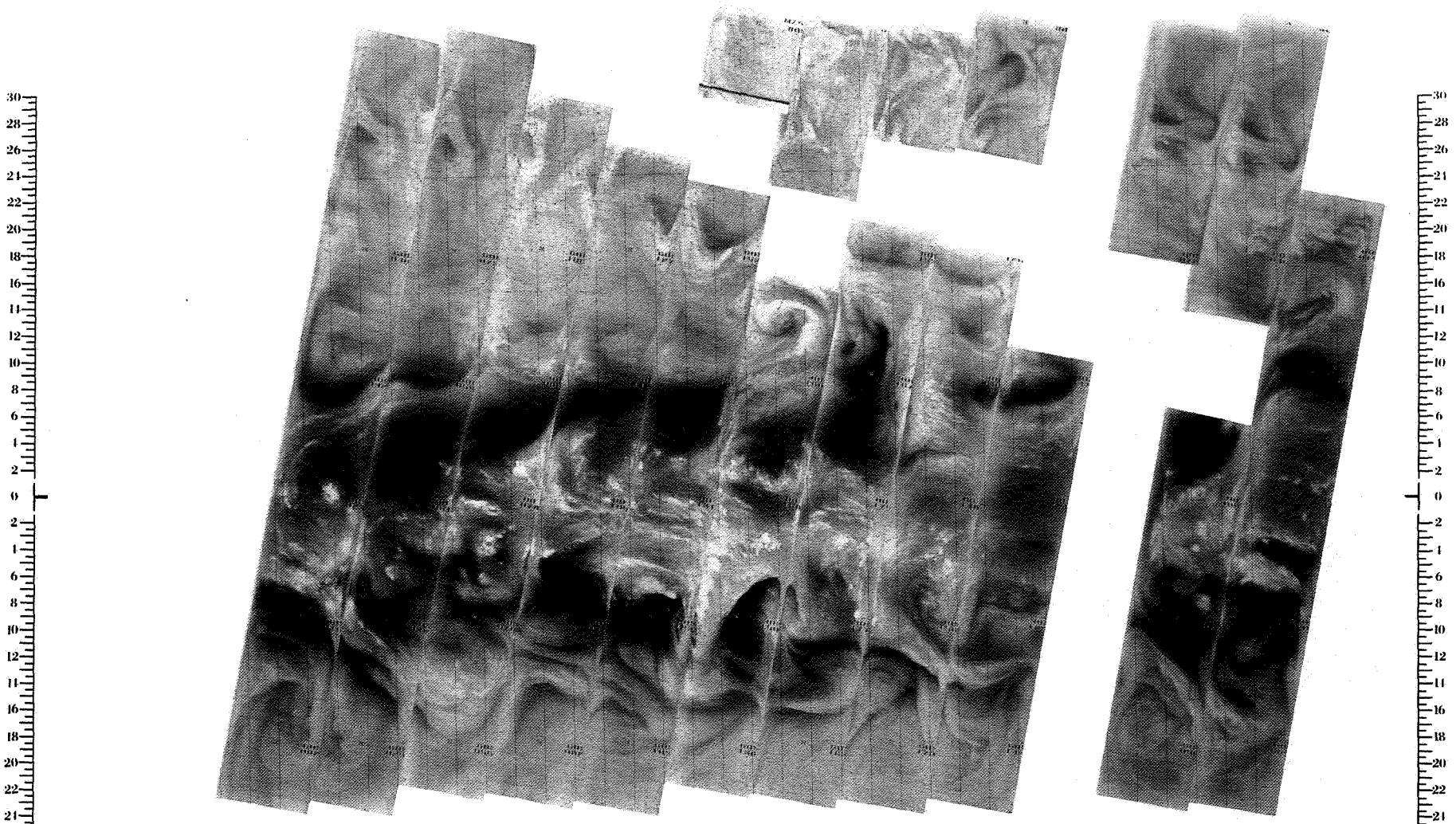
28 JANUARY 1974

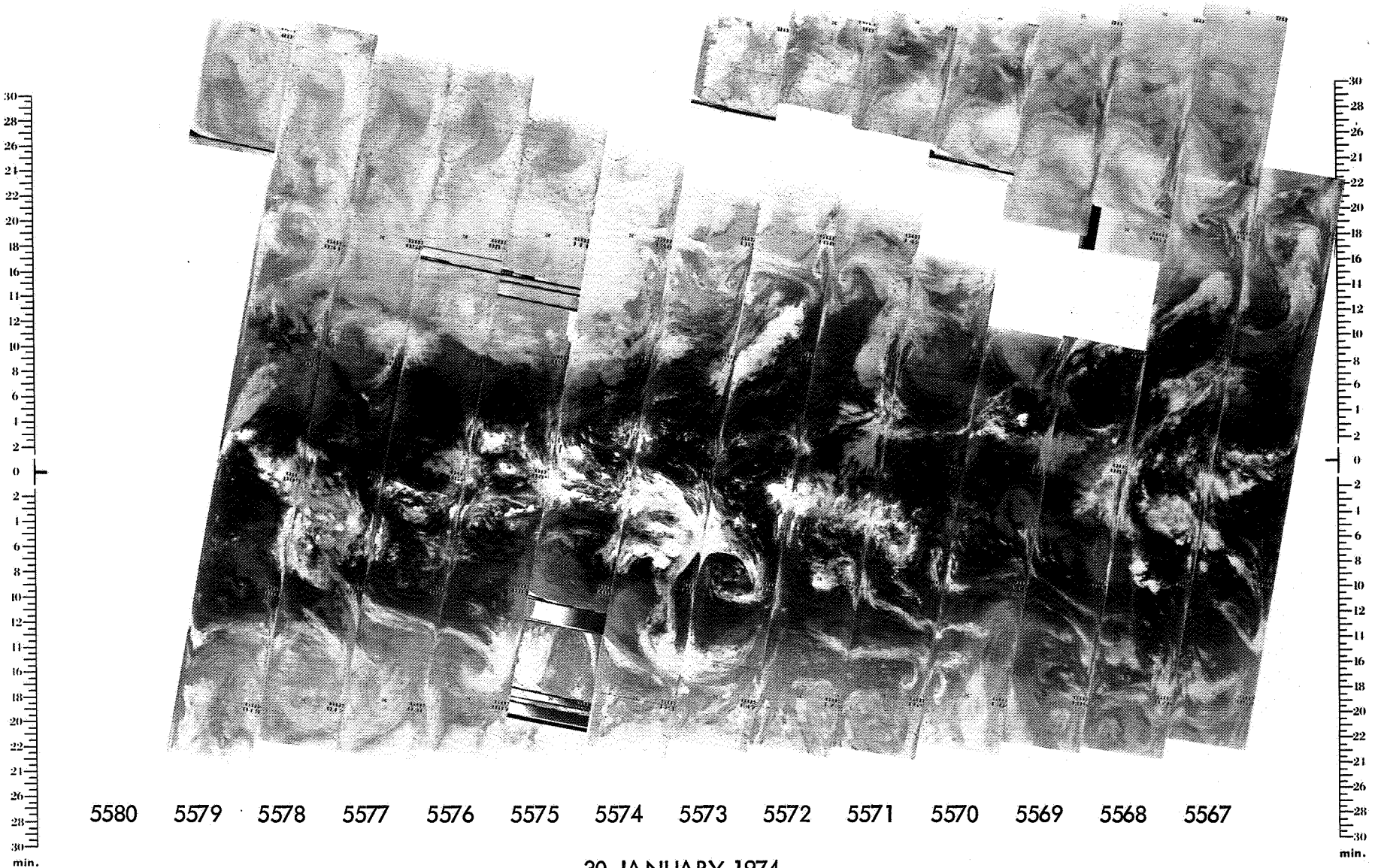
6.7 μm



29 JANUARY 1974

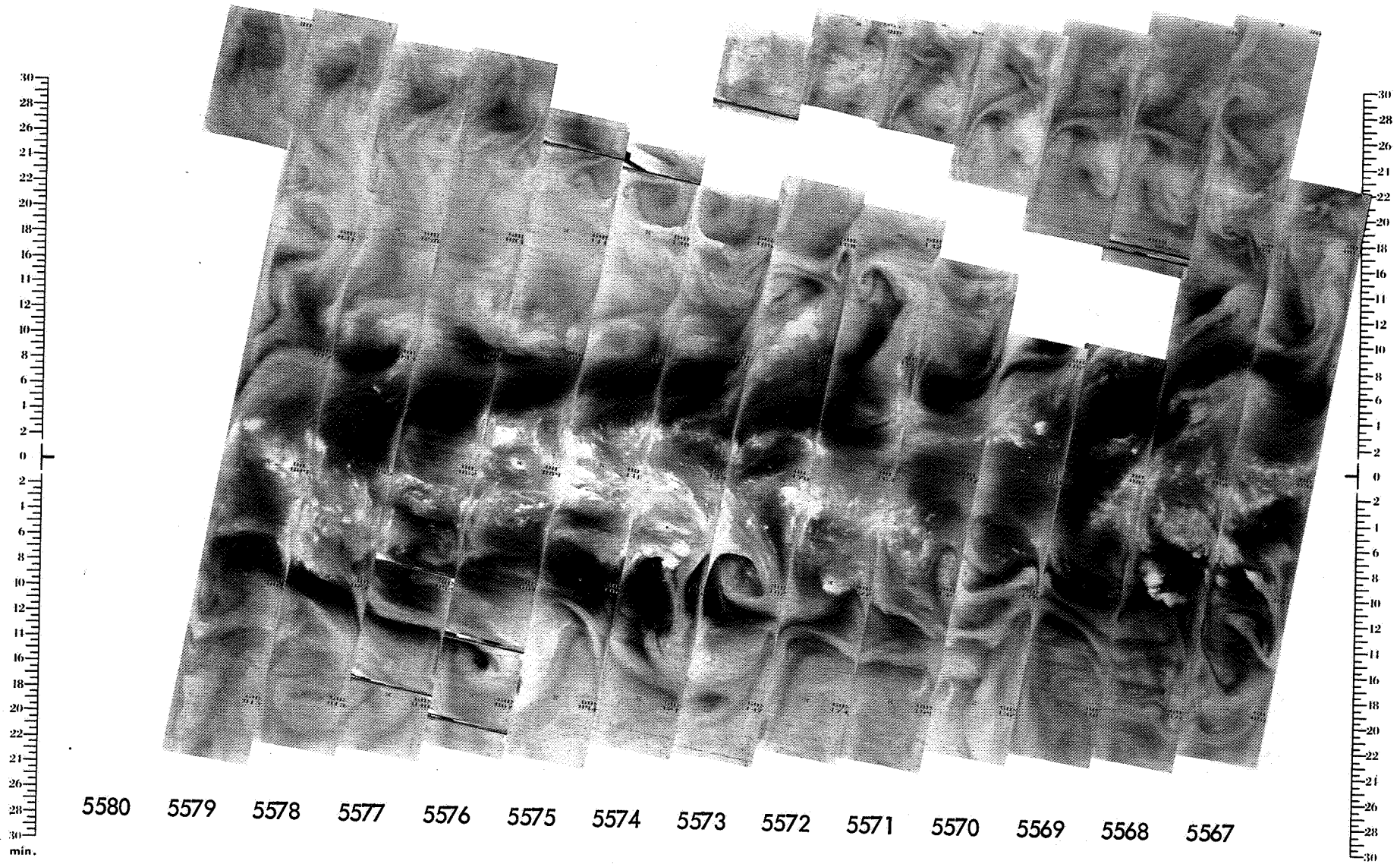
11.5 μm


5566
5565
5564
5563
5562
5561
5560
5559
5558
5557
5556
5555
5554
29 JANUARY 1974
6.7 μm
min.
min.



30 JANUARY 1974

11.5 μm



30 JANUARY 1974

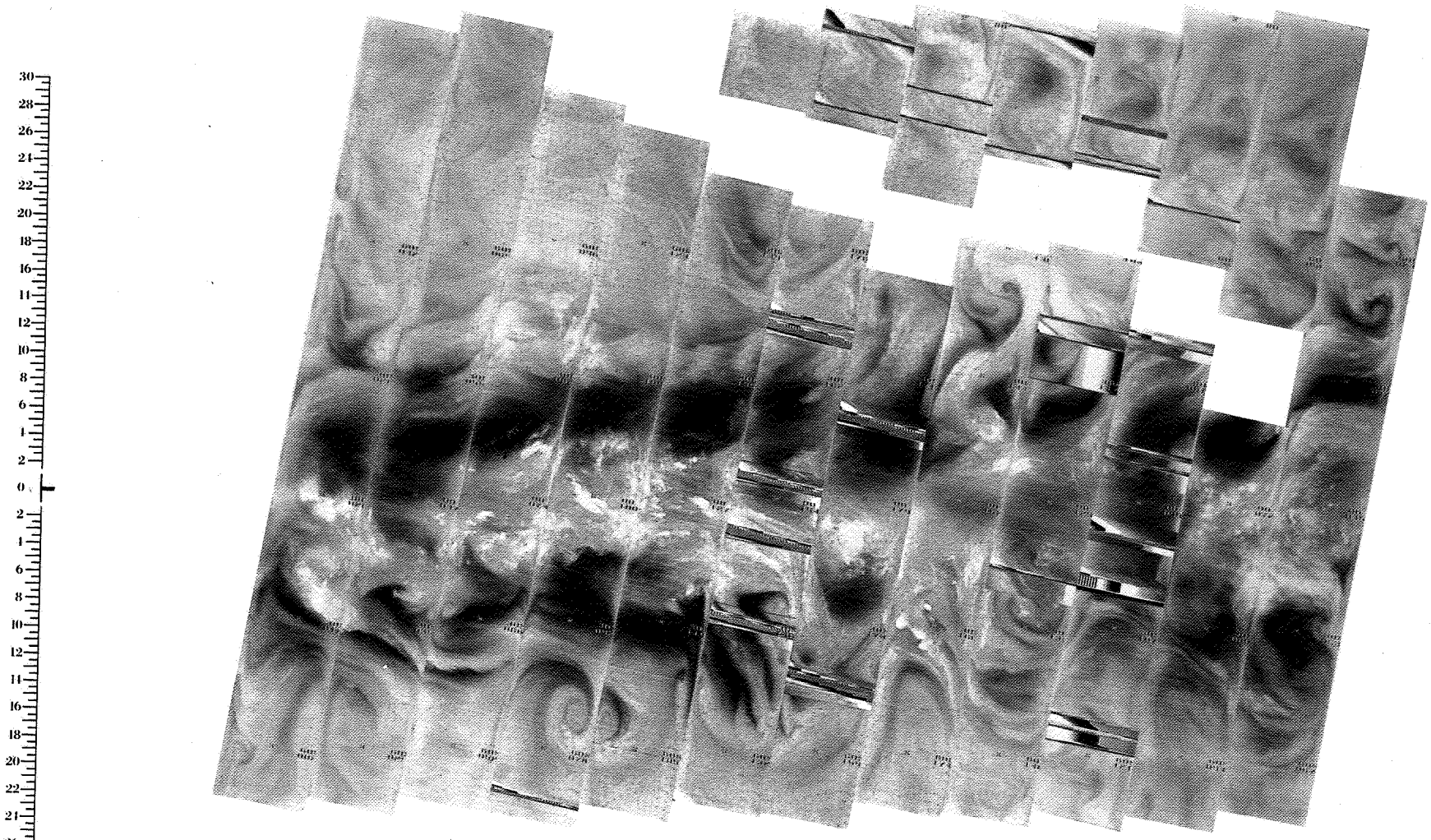
6.7 μm



5593 5592 5591 5590 5589 5588 5587 5586 5585 5584 5583 5582 5581

31 JANUARY 1974

11.5 μm


5593
5592
5591
5590
5589
5588
5587
5586
5585
5584
5583
5582
5581
31 JANUARY 1974
6.7 μm
min.
min.

SECTION 4.2

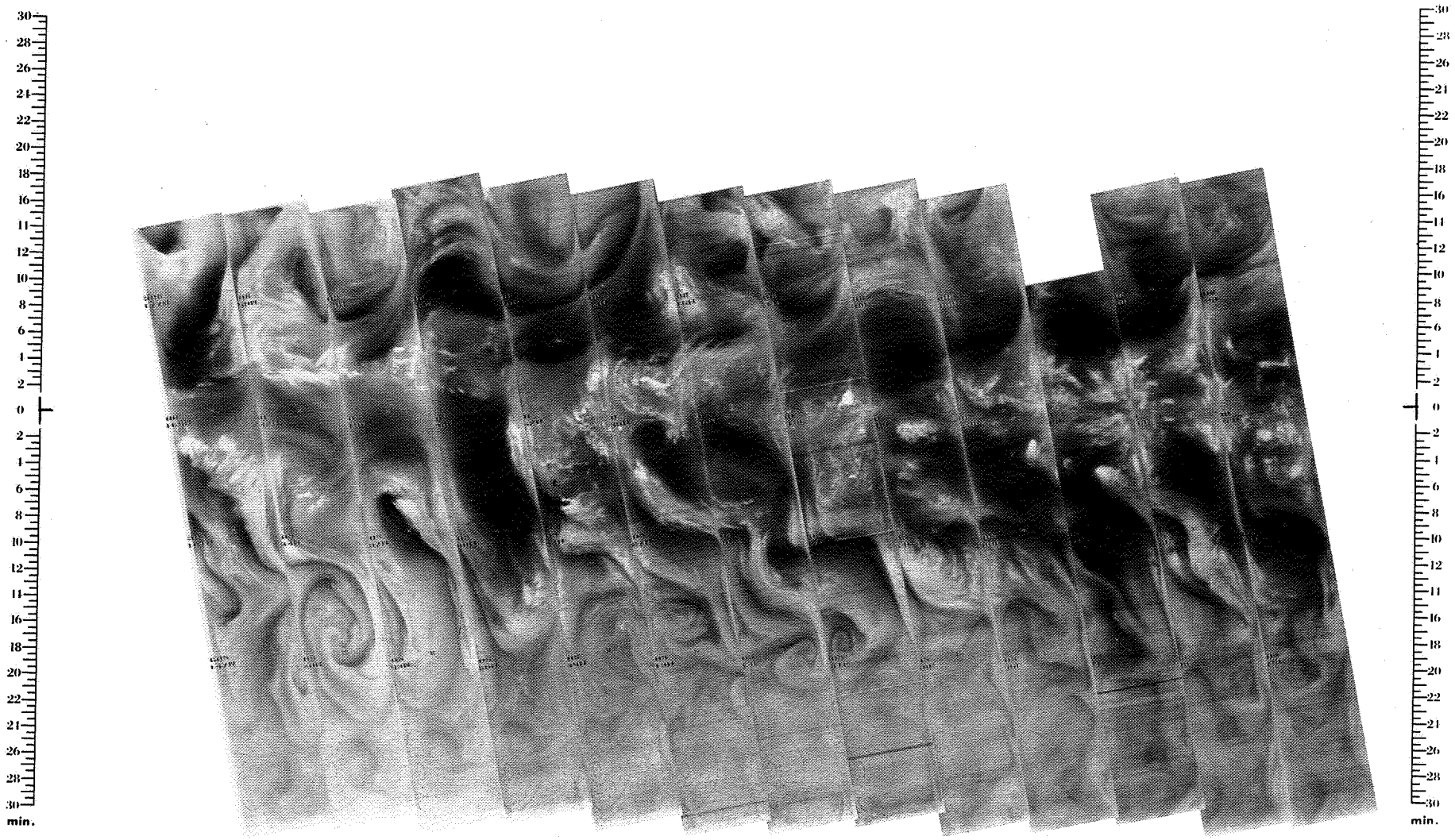
TEMPERATURE HUMIDITY INFRARED RADIOMETER

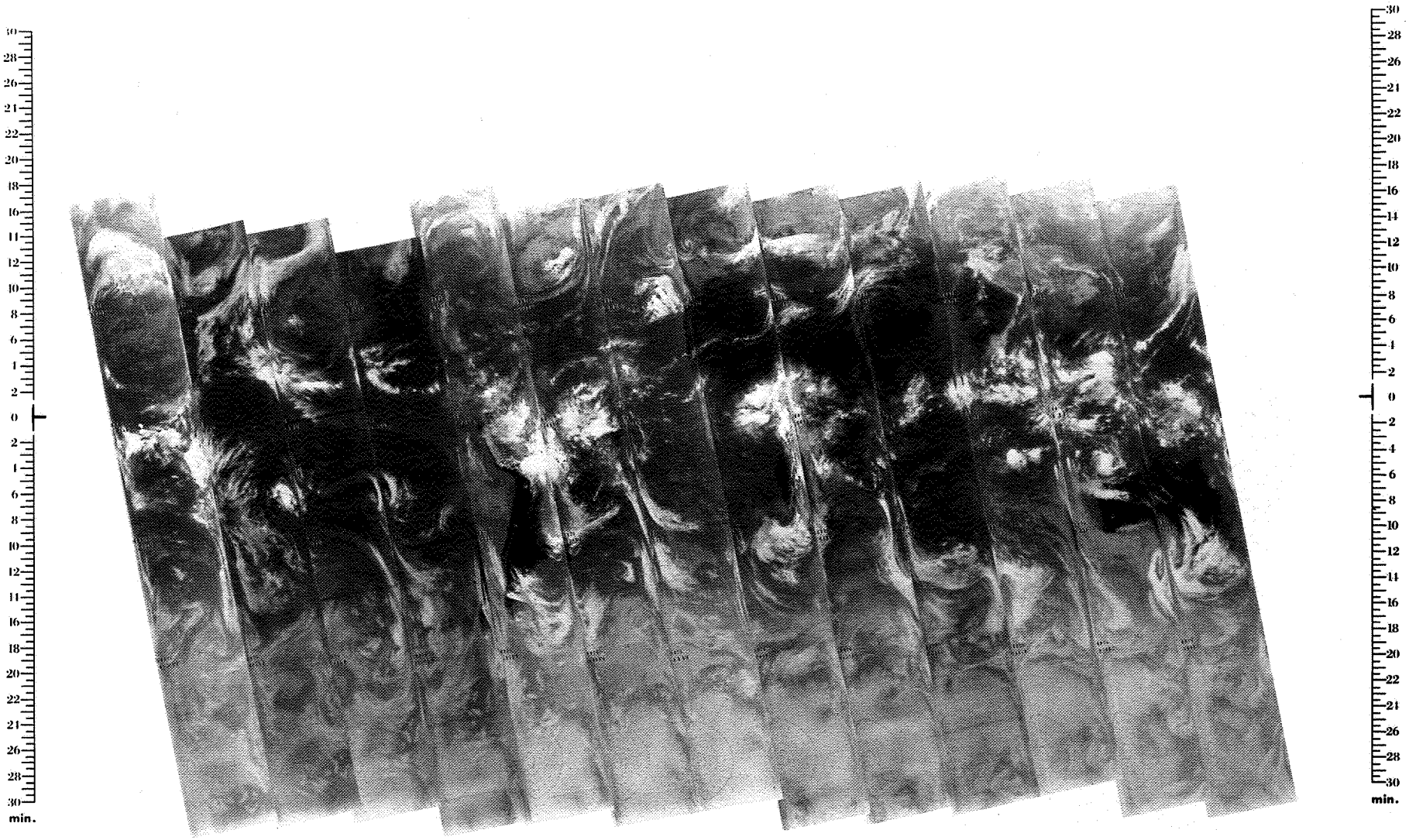
DAYTIME MONTAGES



1 DECEMBER 1973

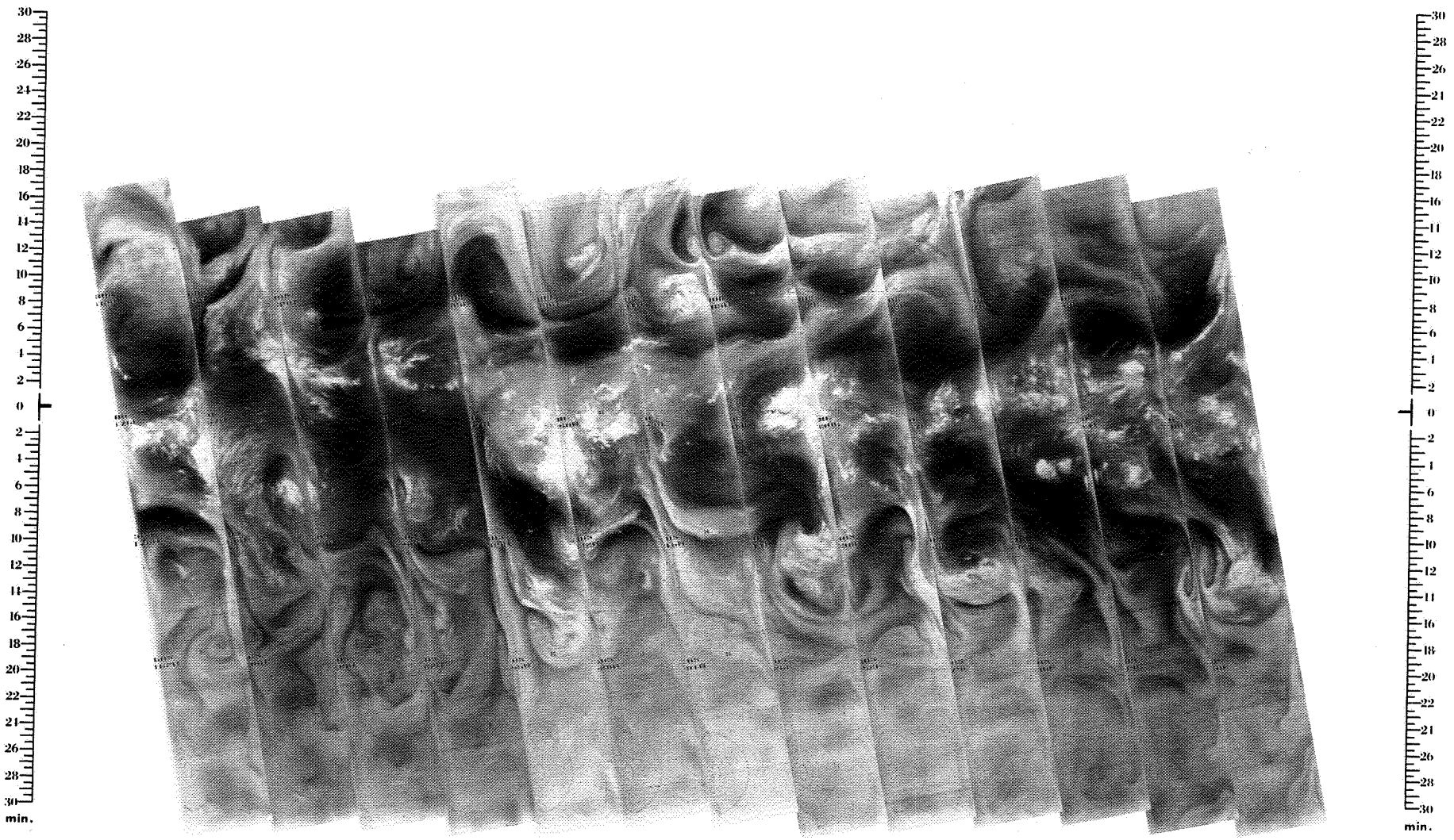
11.5 μm


4774 4773 4772 4771 4770 4769 4768 4767 4766 4765 4764 4763 4762
1 DECEMBER 1973
6.7 μm
min.
min.

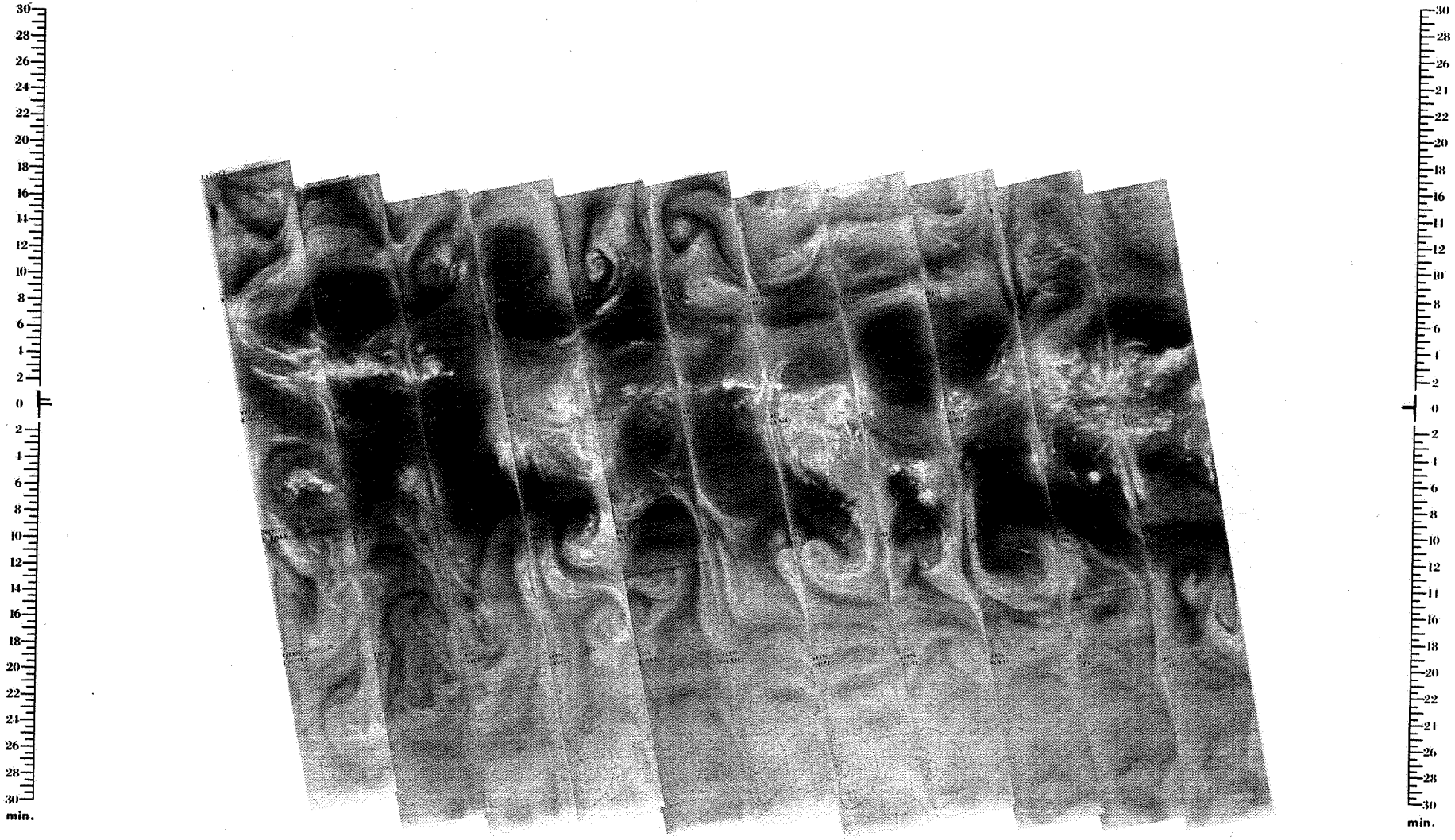


2 DECEMBER 1973

11.5 μm


min.
min.
4788 4787 4786 4785 4784 4783 4782 4781 4780 4779 4778 4777 4776 4775
2 DECEMBER 1973
6.7 μm

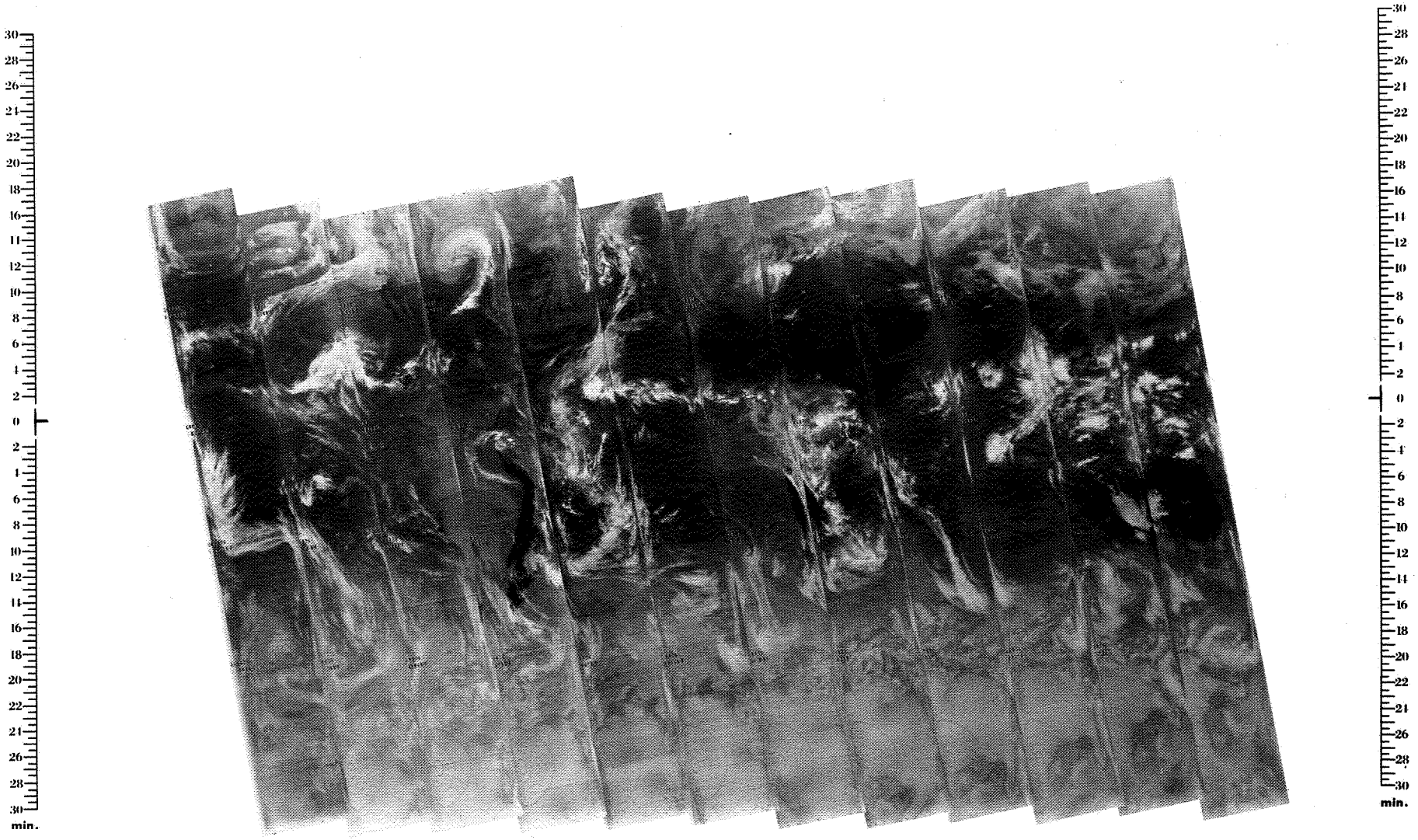
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.
4789 4790 4791 4792 4793 4795 4795 4796 4797 4798 4799 4800 4801
3 DECEMBER 1973
11.5 μm
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

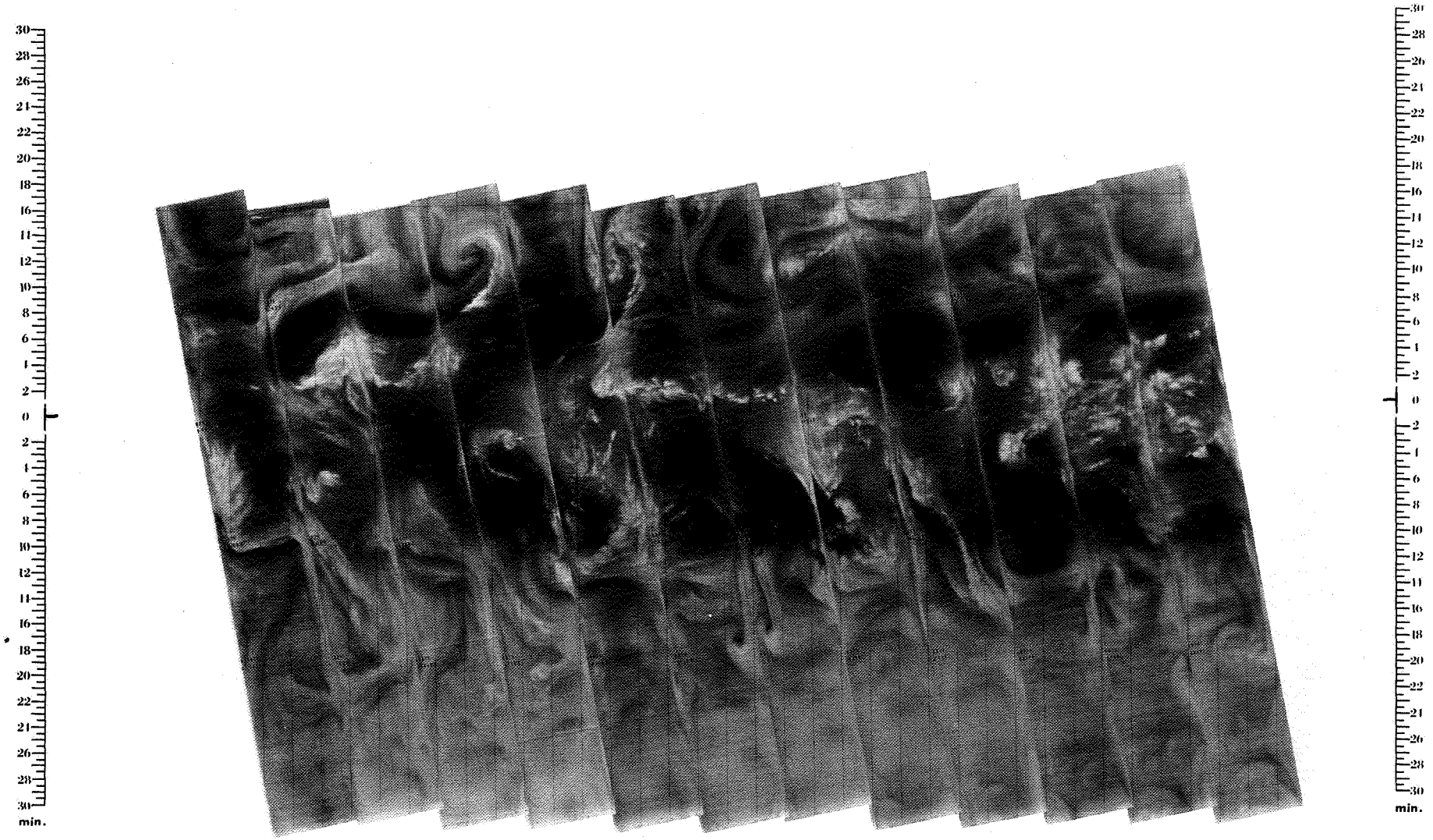


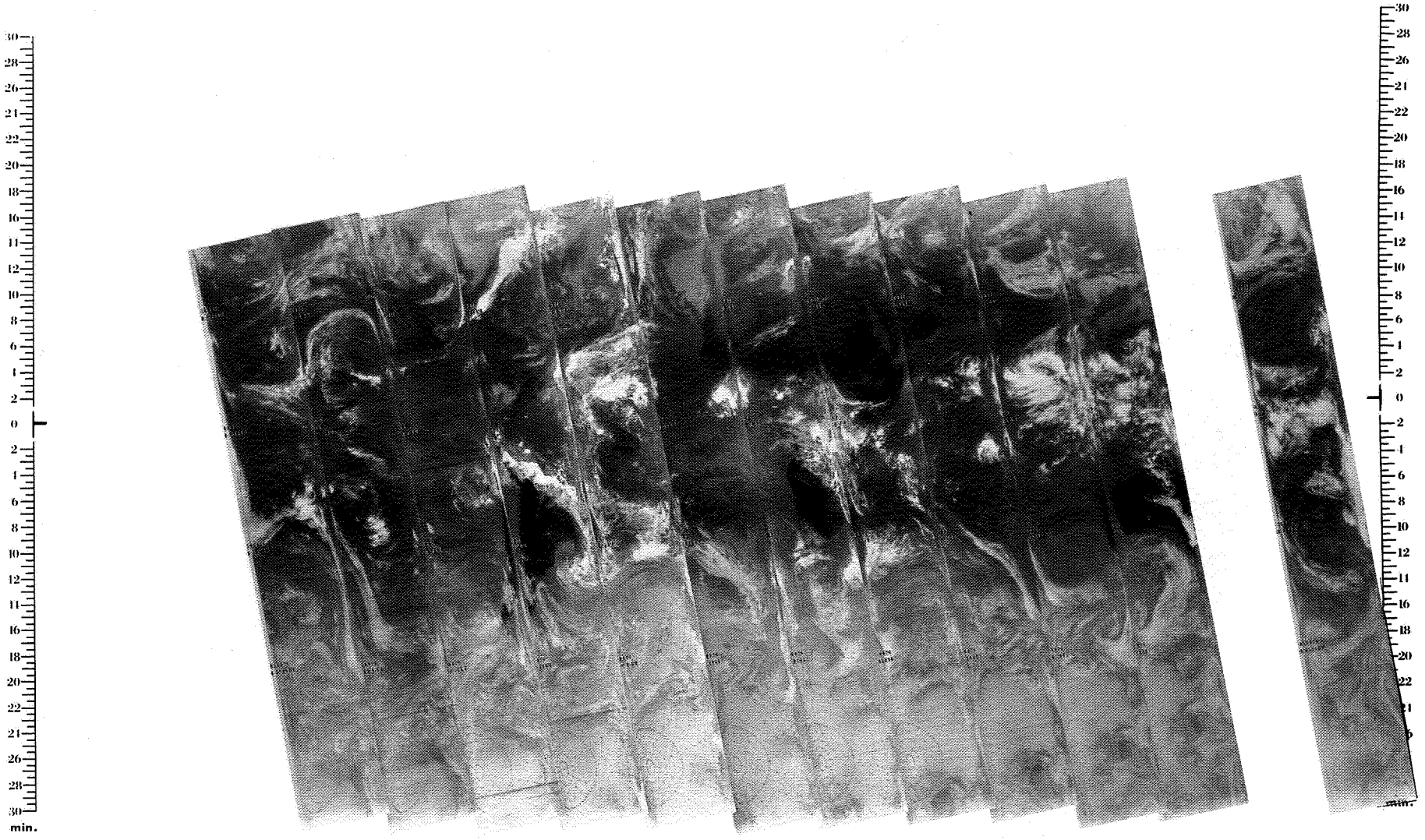
4801 4800 4799 4798 4797 4796 4795 4795 4793 4792 4791 4790 4789

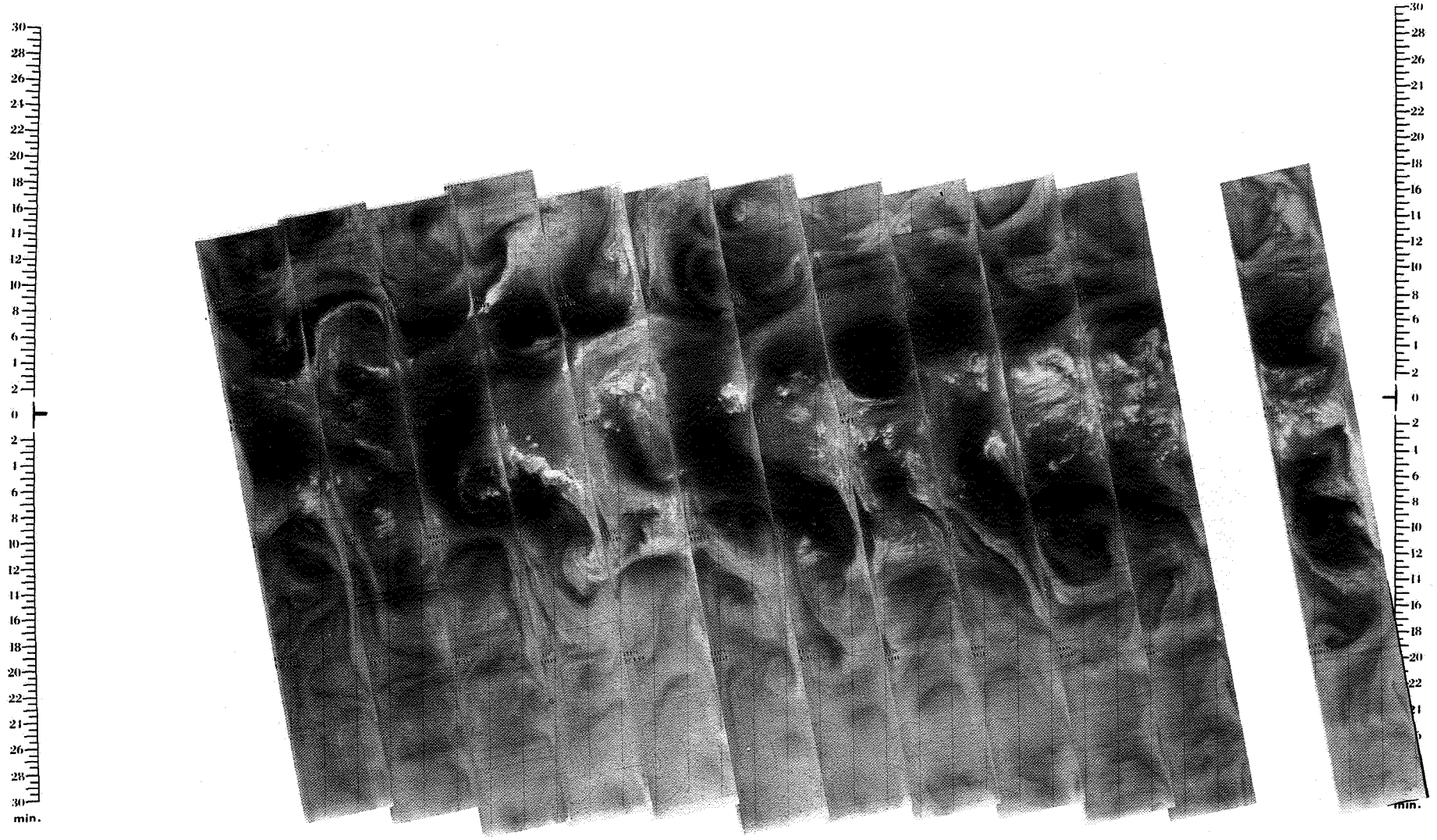
3 DECEMBER 1973

6.7 μm


4814 4813 4812 4811 4810 4809 4808 4807 4806 4805 4804 4803 4802
4 DECEMBER 1973
11.5 μm
min.
min.

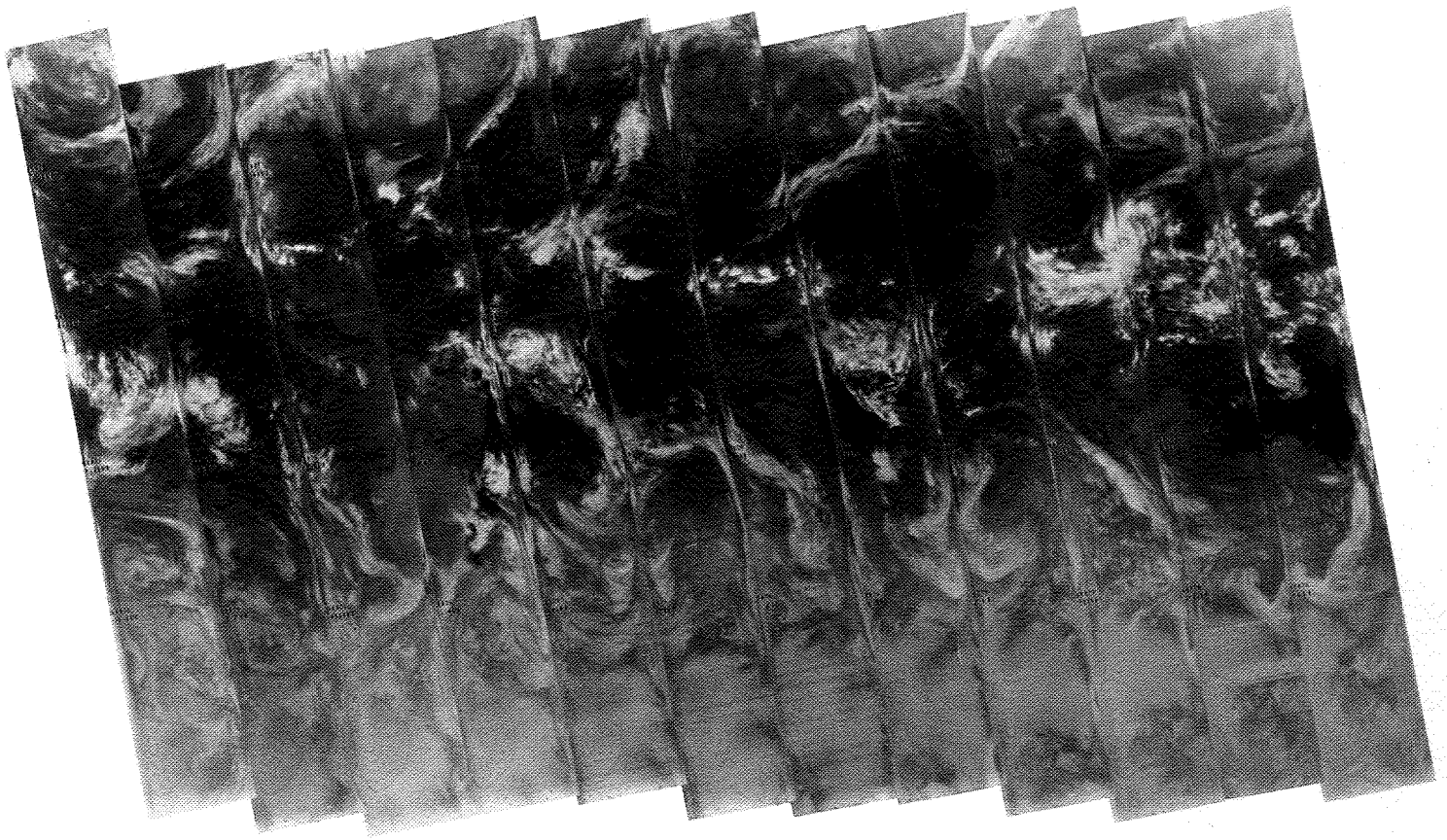

min.
min.
4814 4813 4812 4811 4810 4809 4808 4807 4806 4805 4804 4803 4802
4 DECEMBER 1973
6.7 μm


4828
4827
4826
4825
4824
4823
4822
4821
4820
4819
4818
4817
4816
4815
5 DECEMBER 1973
11.5 μm
min.



5 DECEMBER 1973

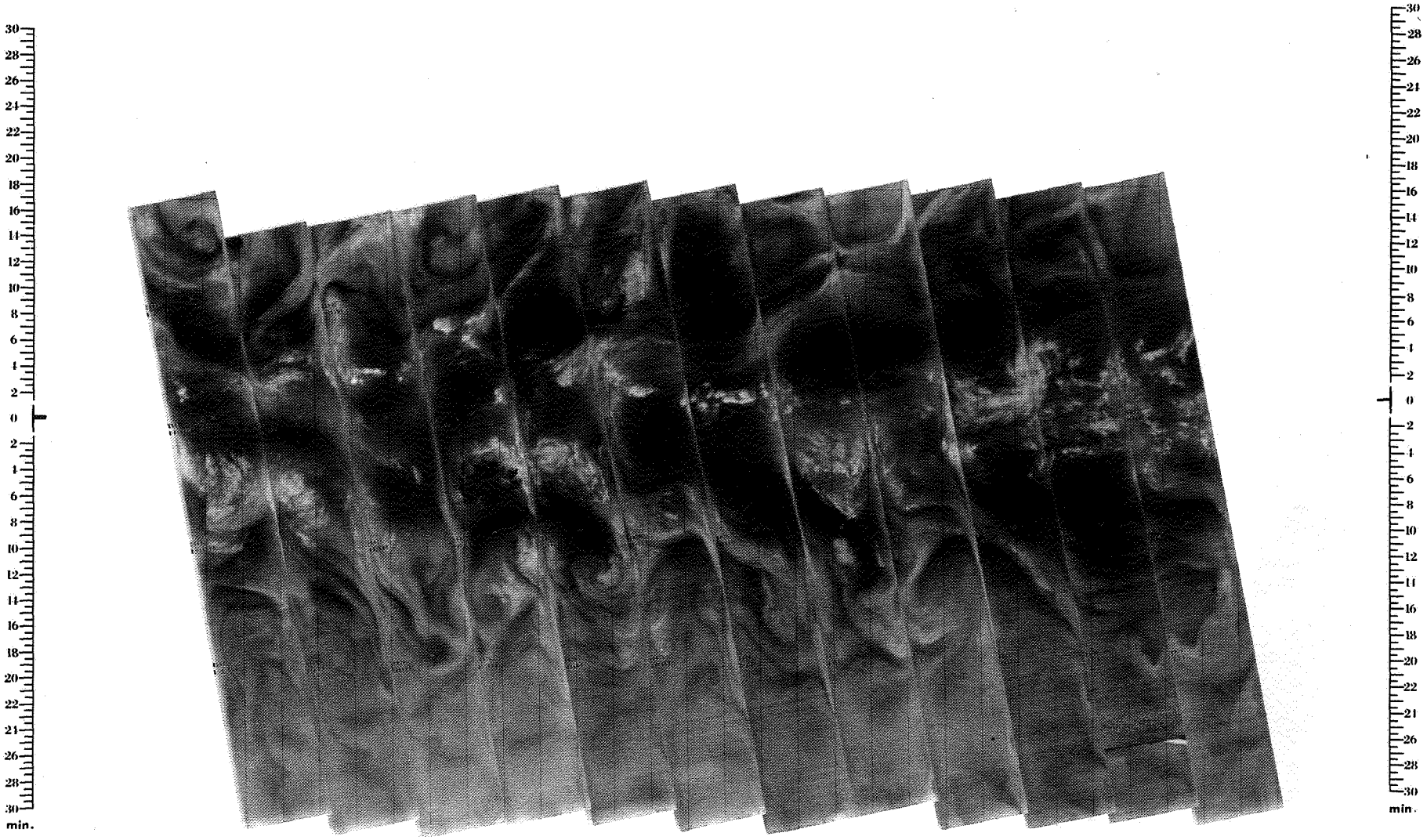
6.7 μm

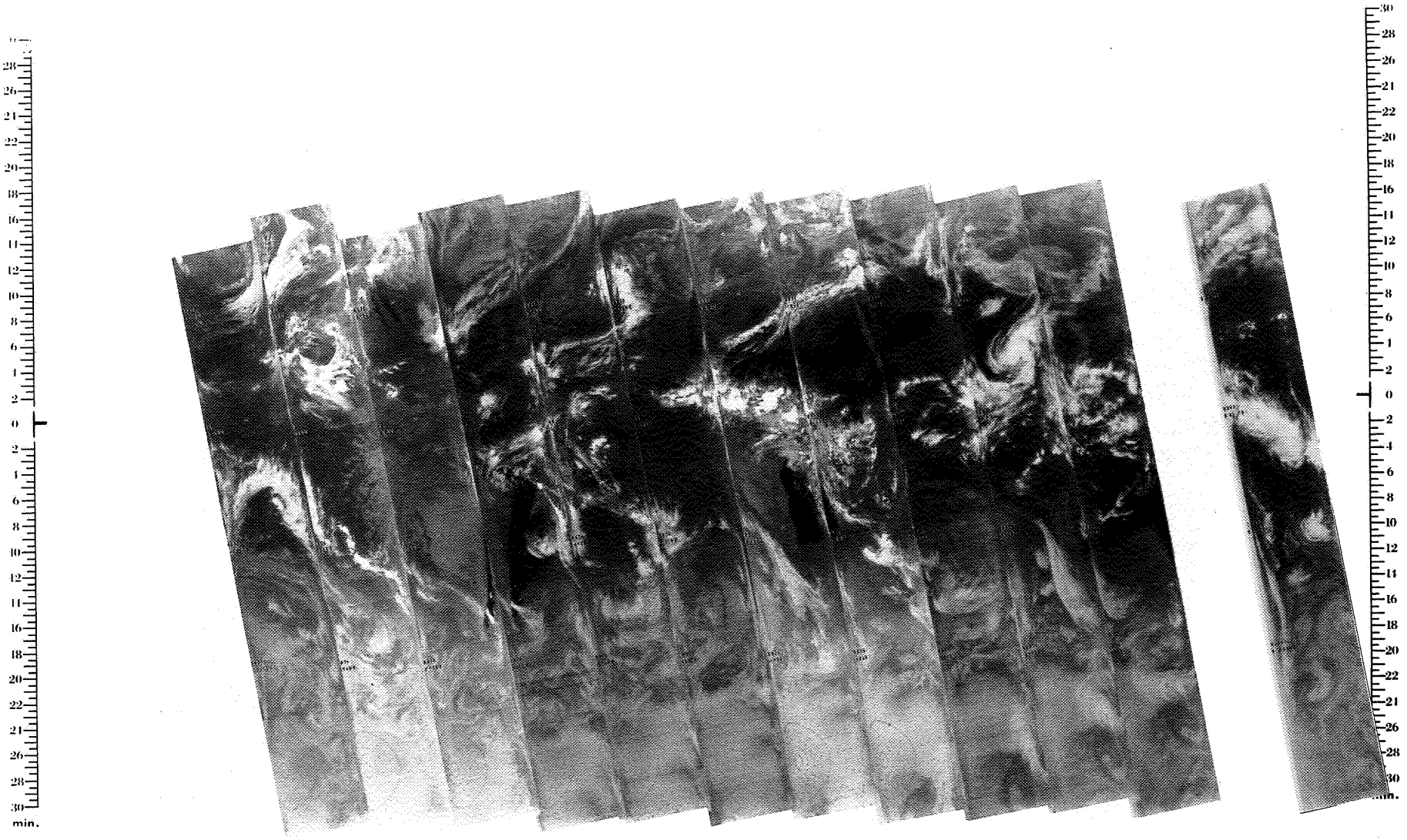


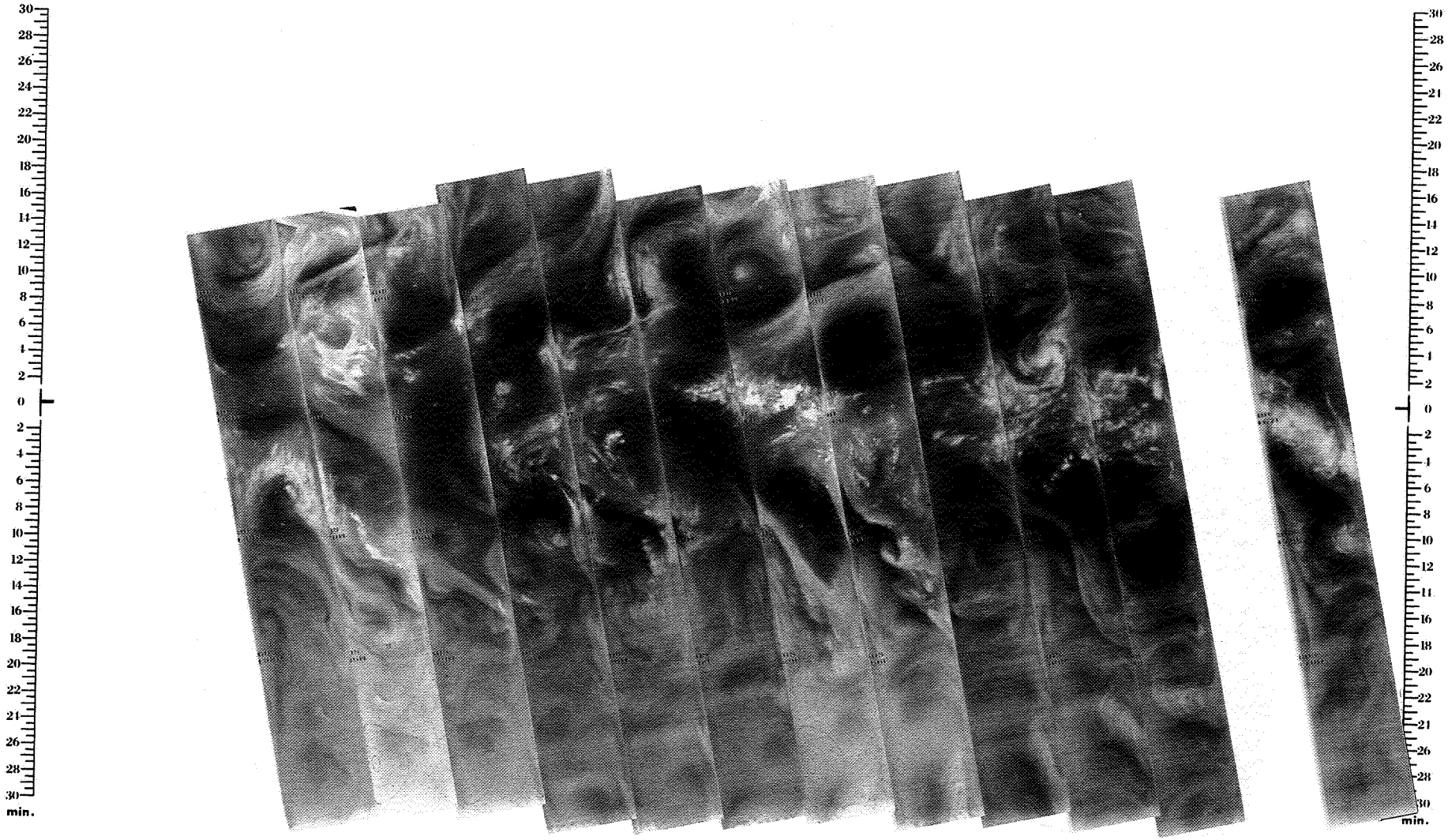
4841 4840 4839 4838 4837 4836 4835 4834 4833 4832 4831 4830 4829

6 DECEMBER 1973

11.5 μm

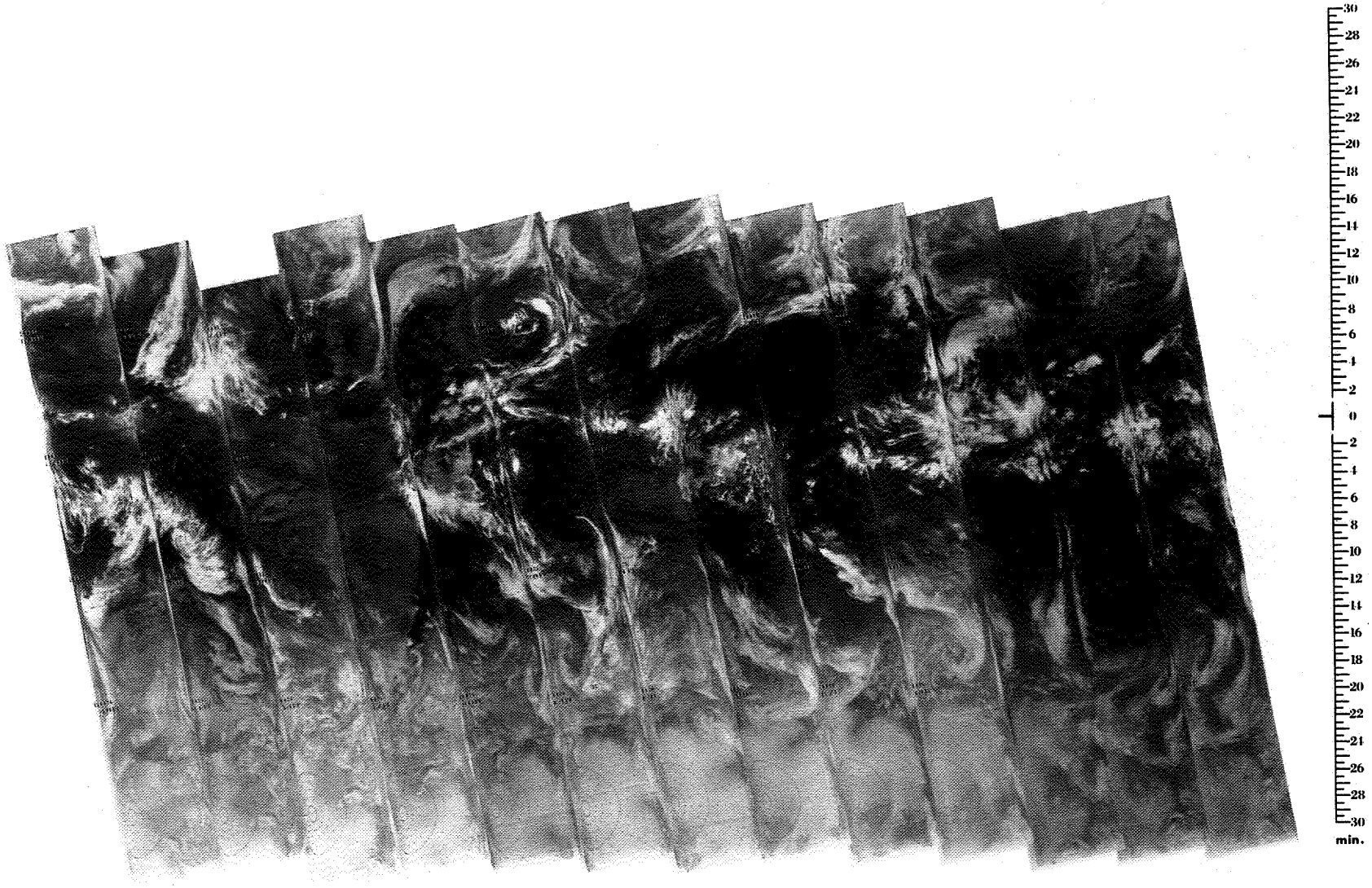

4841 4840 4839 4838 4837 4836 4835 4834 4833 4832 4831 4830 4829
6 DECEMBER 1973
6.7 μm
min.
min.


min.
4855 4854 4853 4852 4851 4850 4849 4848 4847 4846 4845 4844 4843 4842
7 DECEMBER 1973
11.5 μm



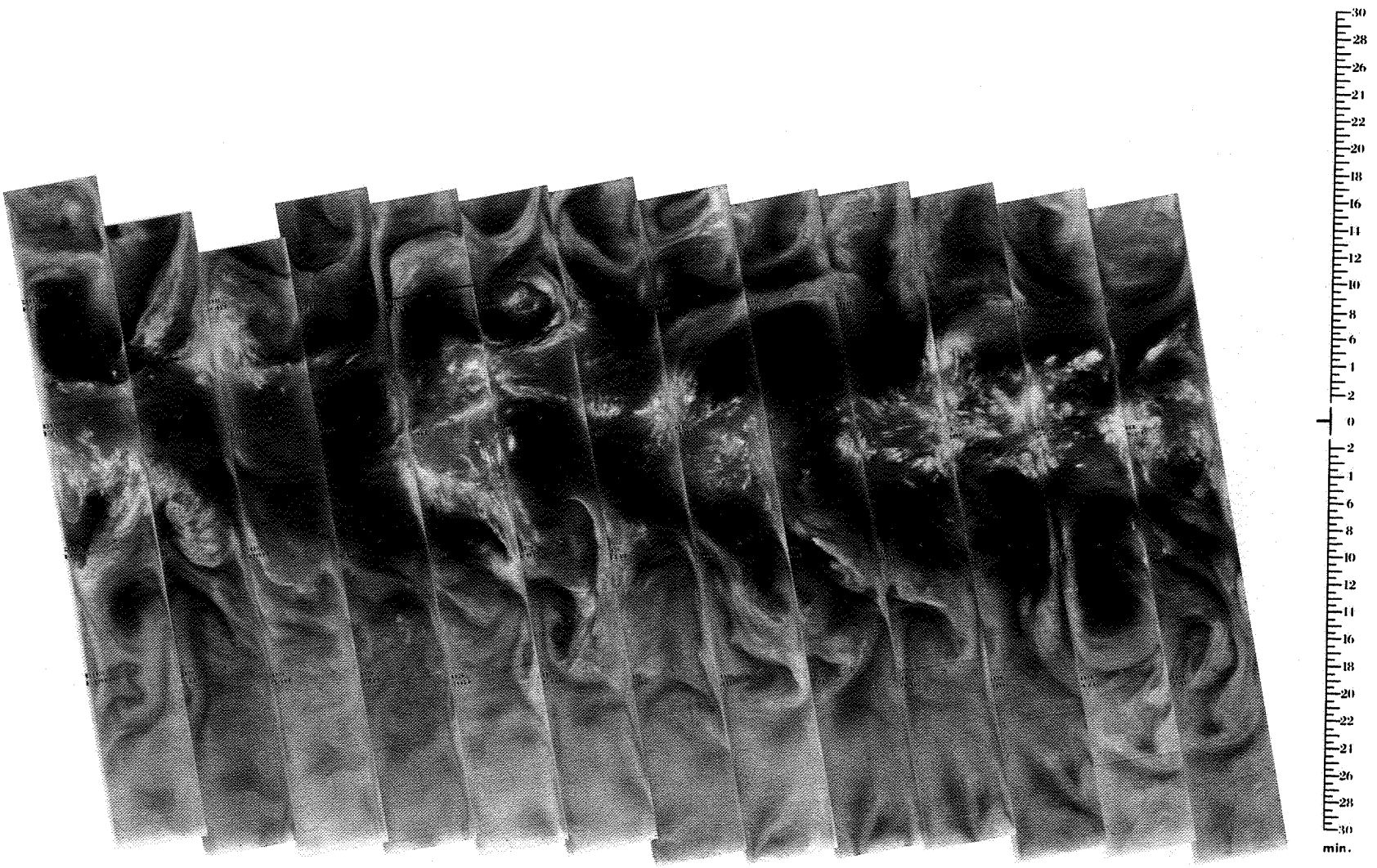
7 DECEMBER 1973

6.7 μm



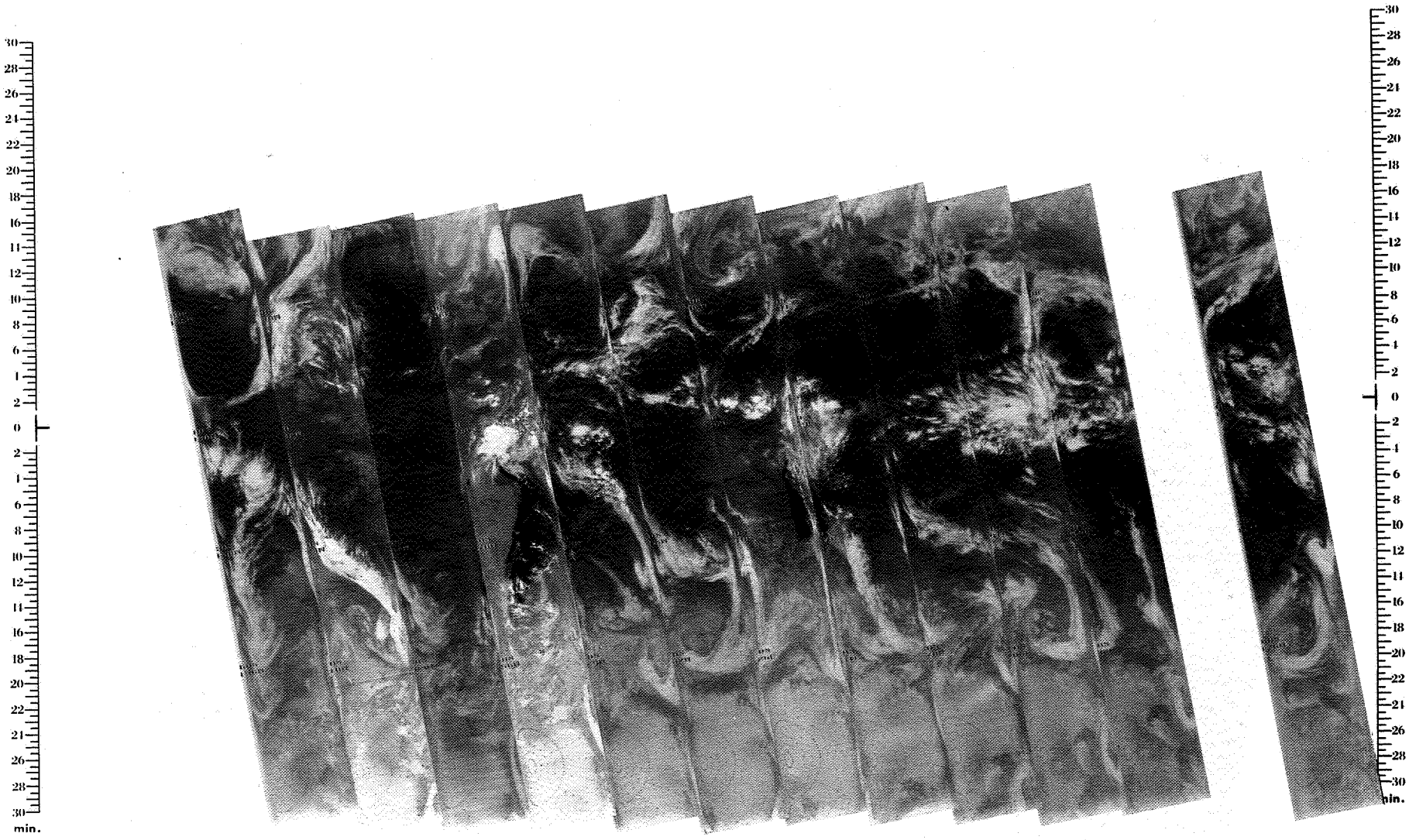
8 DECEMBER 1973

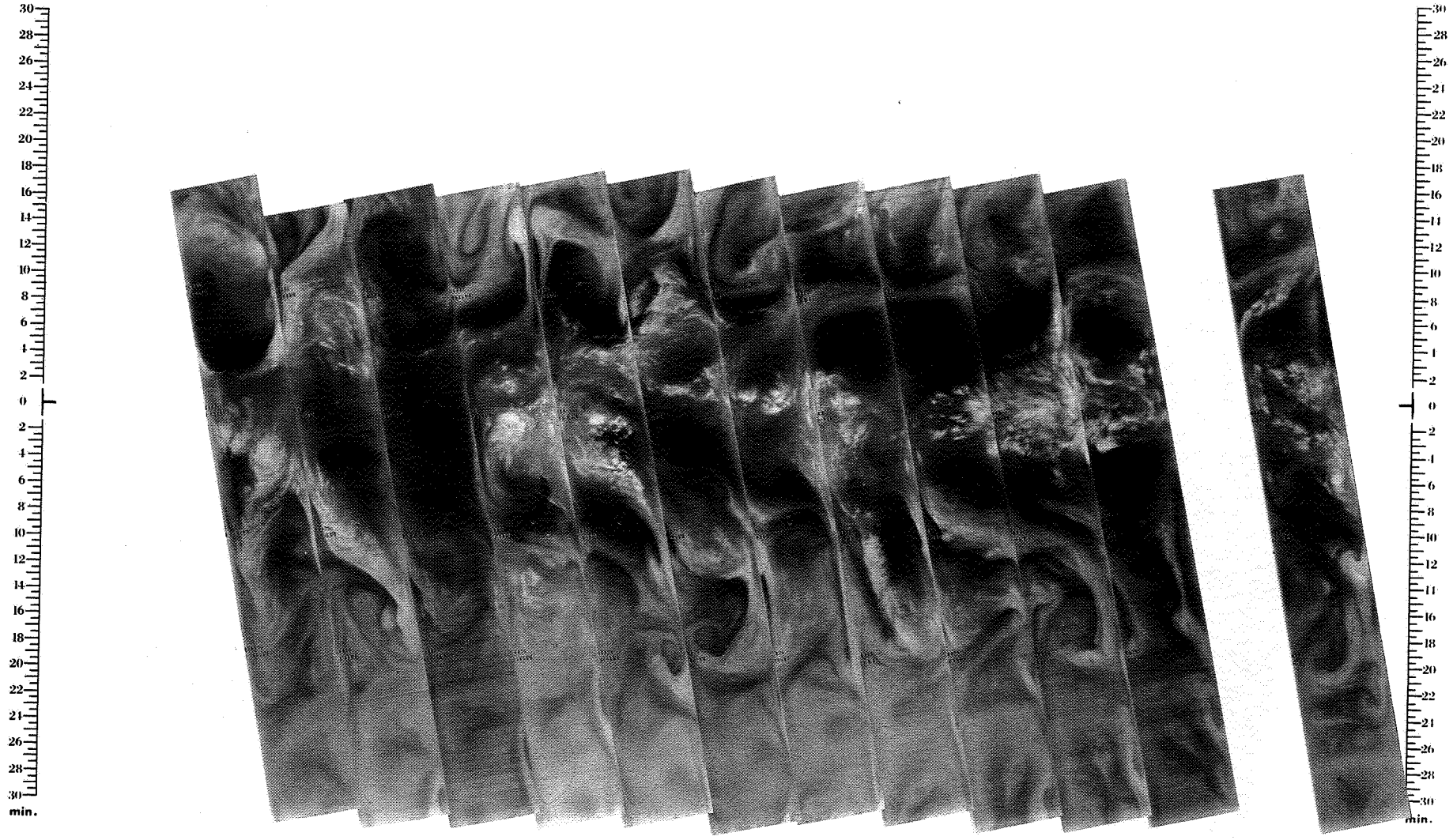
11.5 μm



8 DECEMBER 1973

6.7 μm

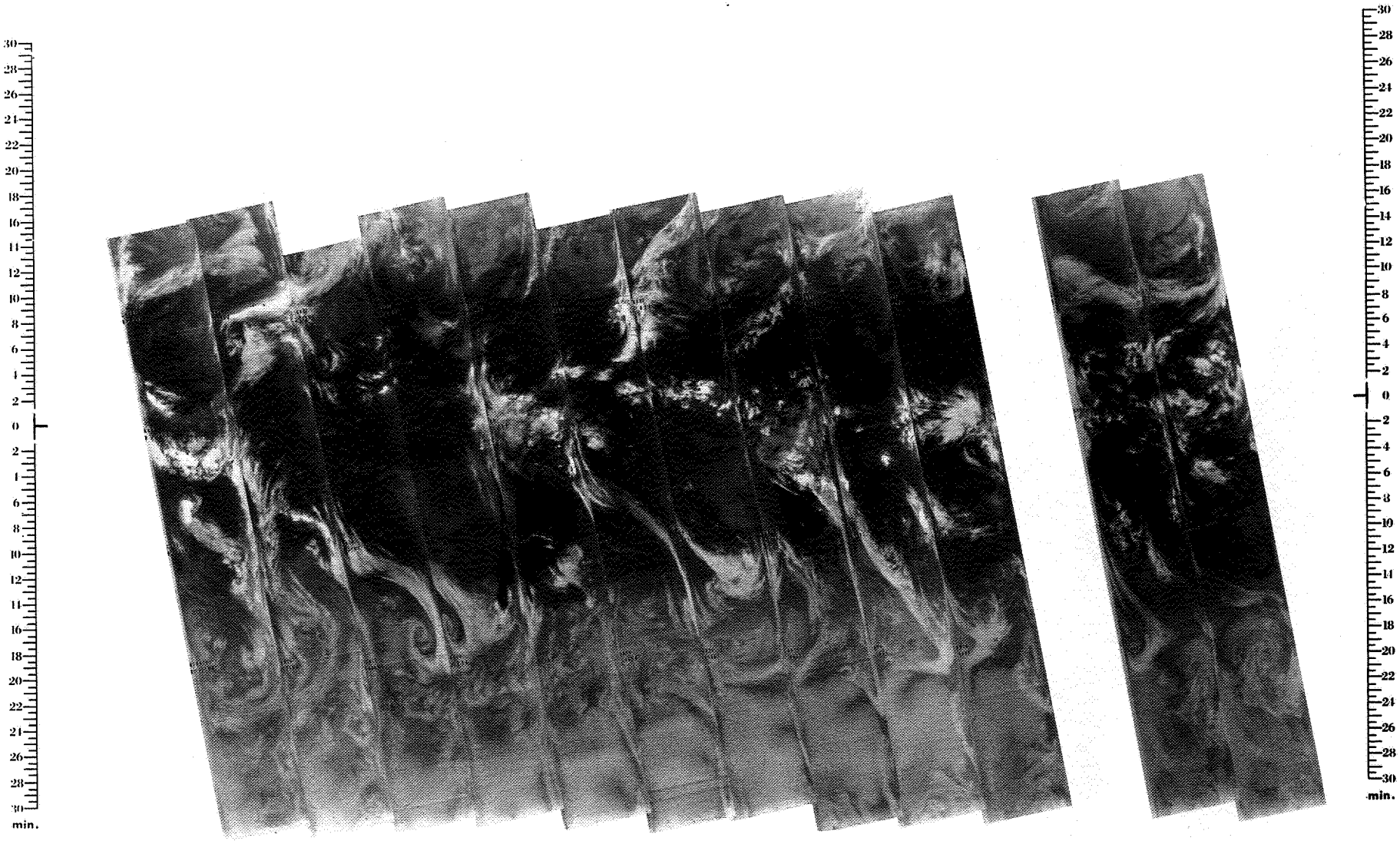

min.
4882
4881
4880
4879
4878
4877
4876
4875
4874
4873
4872
4871
4870
4869
9 DECEMBER 1973
11.5 μm



4882 4881 4880 4879 4878 4877 4876 4875 4874 4873 4872 4871 4870 4869

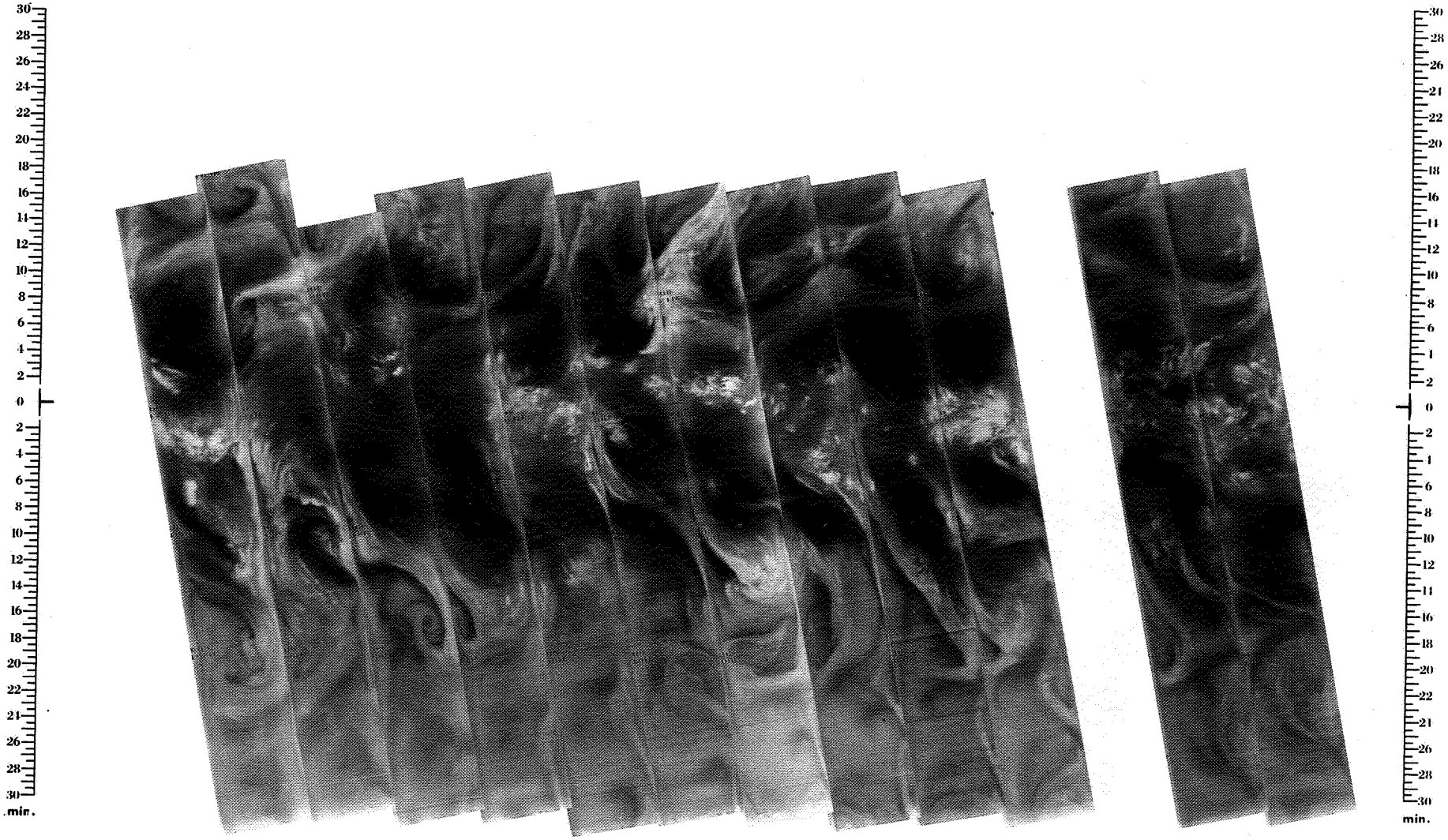
9 DECEMBER 1973

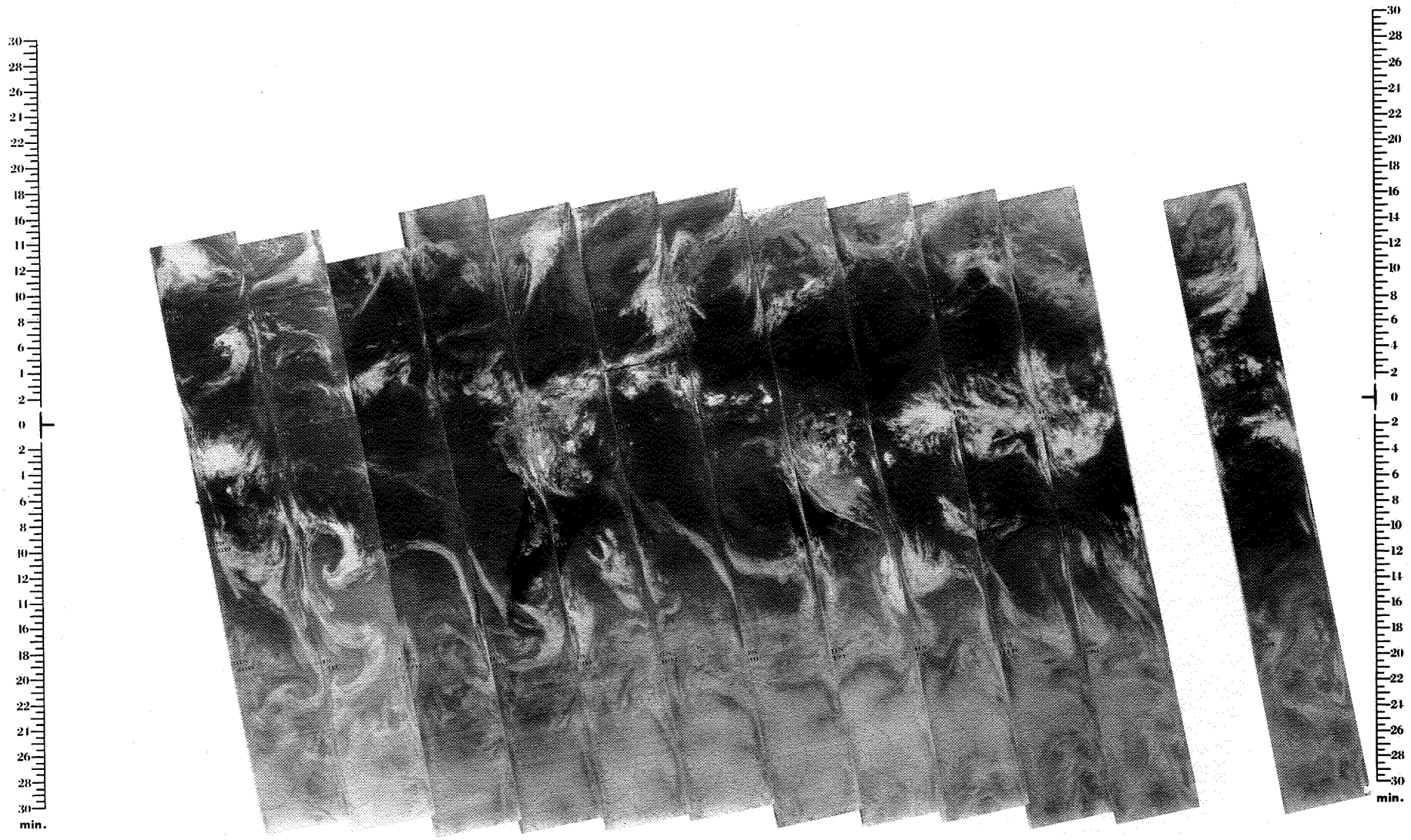
6.7 μm



10 DECEMBER 1973

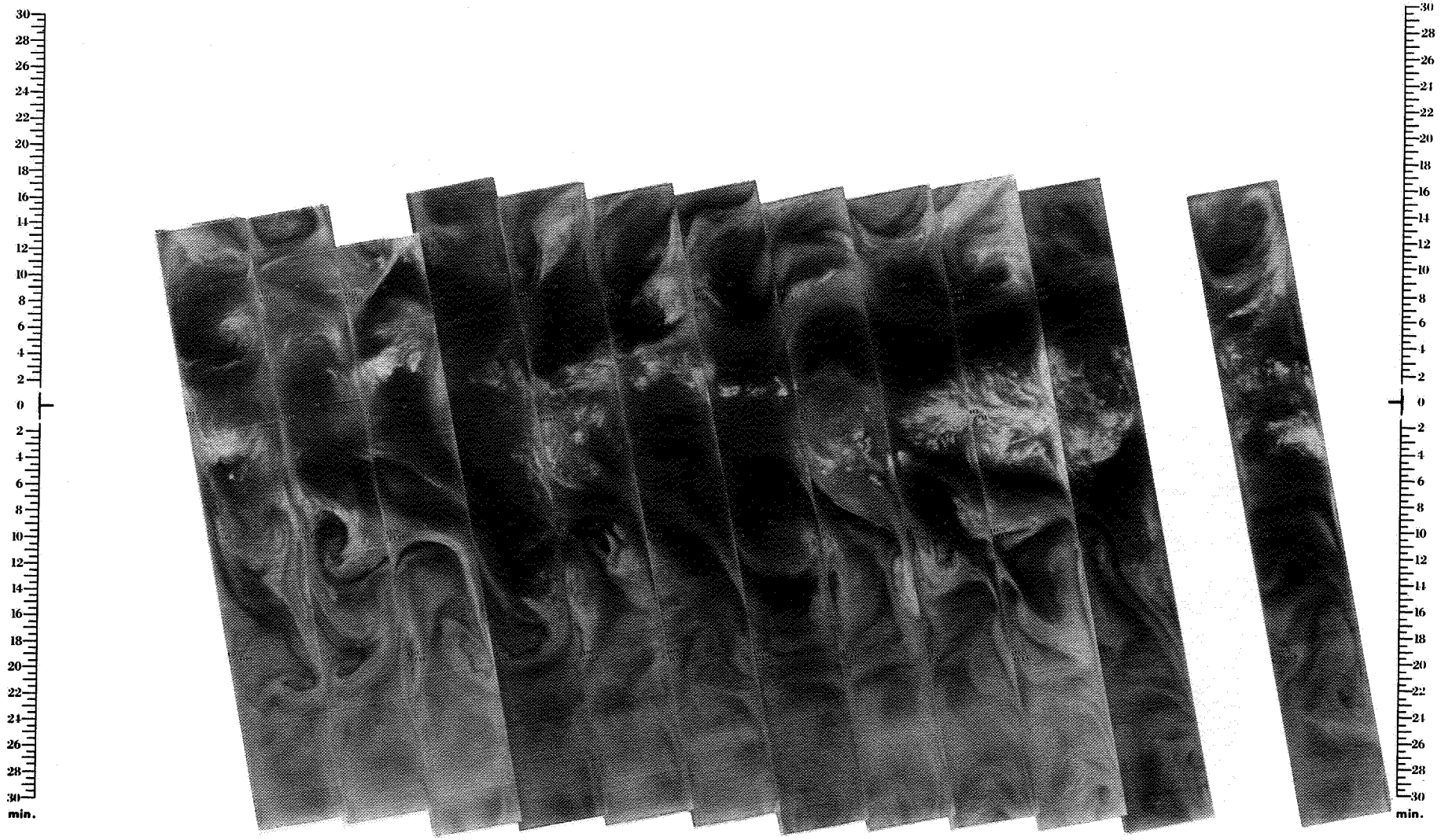
11.5 μm


min.
min.
4895 4894 4893 4892 4891 4890 4889 4888 4887 4886 4885 4884 4883
10 DECEMBER 1973
6.7 μm



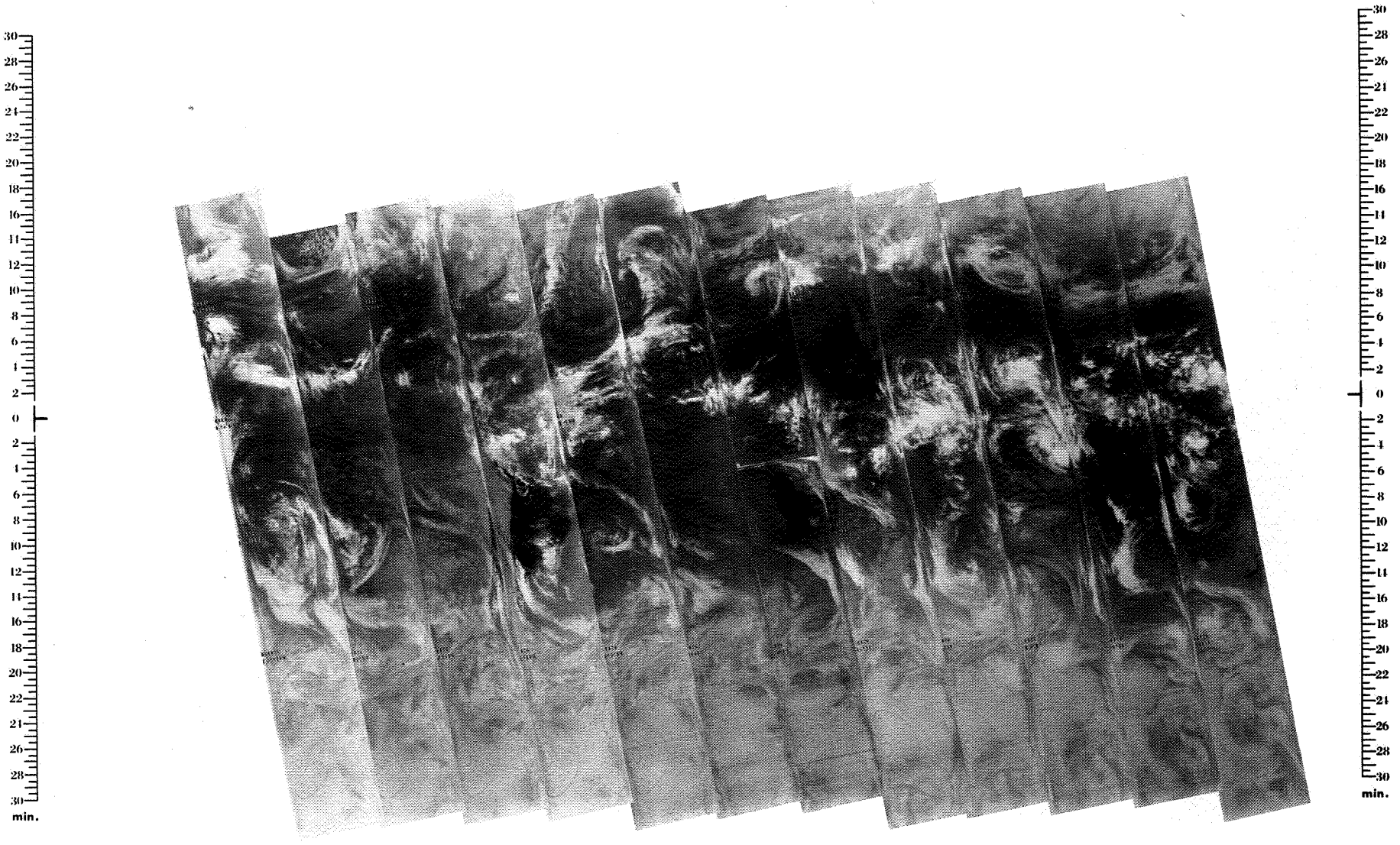
11 DECEMBER 1973

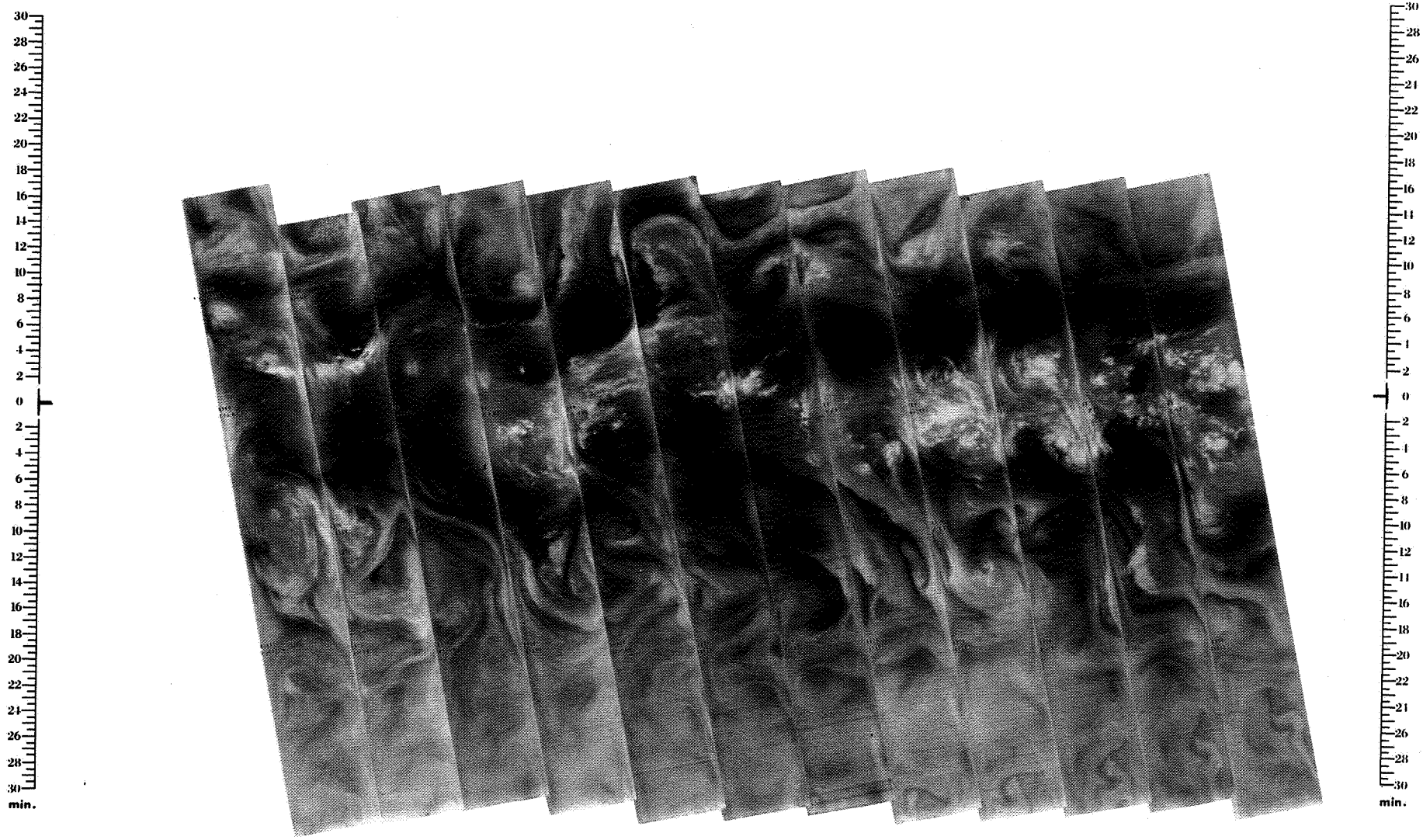
11.5 μm



11 DECEMBER 1973

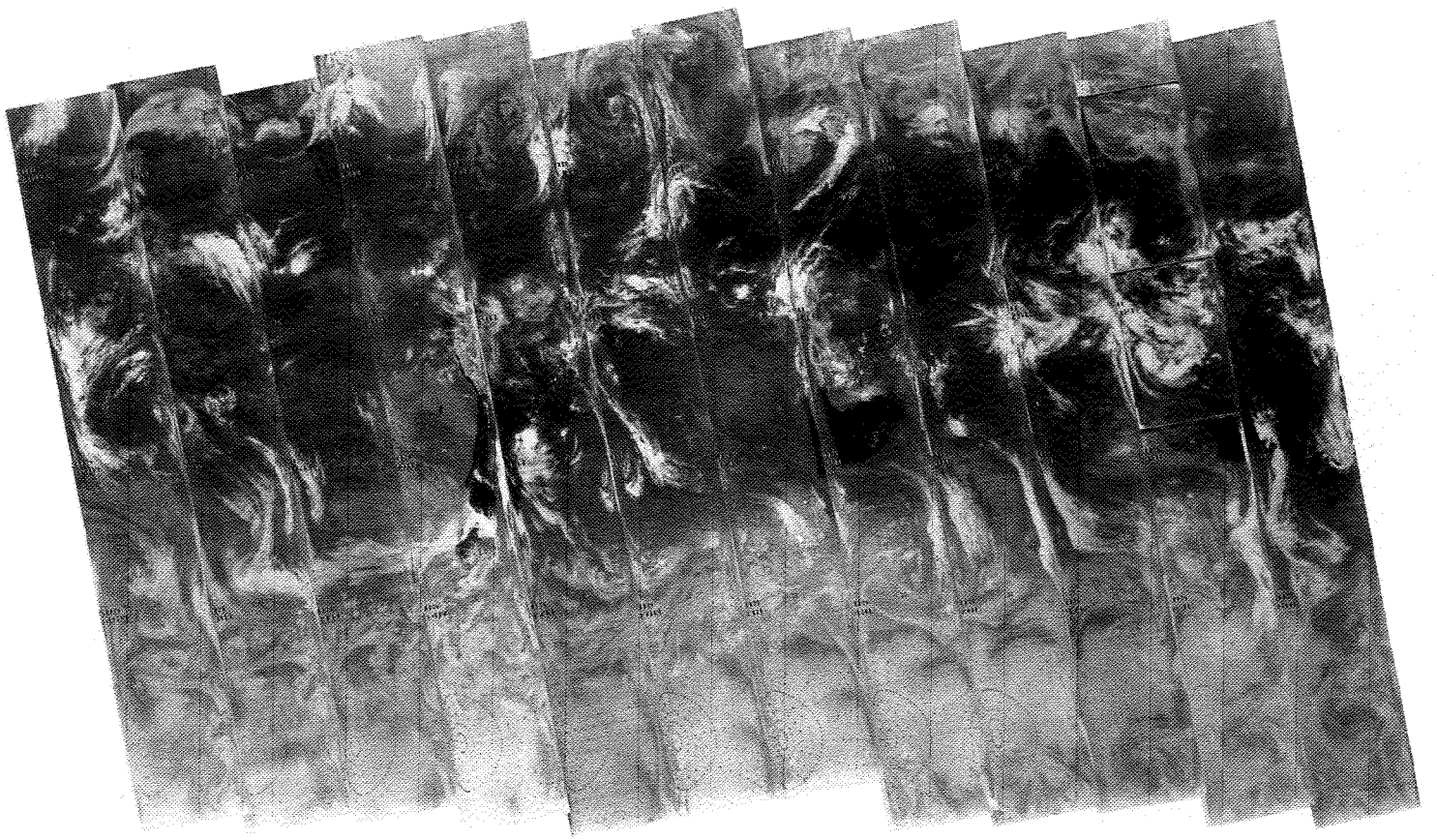
6.7 μm


min.
min.
4922 4921 4930 4919 4918 4917 4916 4915 4914 4913 4912 4911 4910 4909
12 DECEMBER 1973
11.5 μm



12 DECEMBER 1973

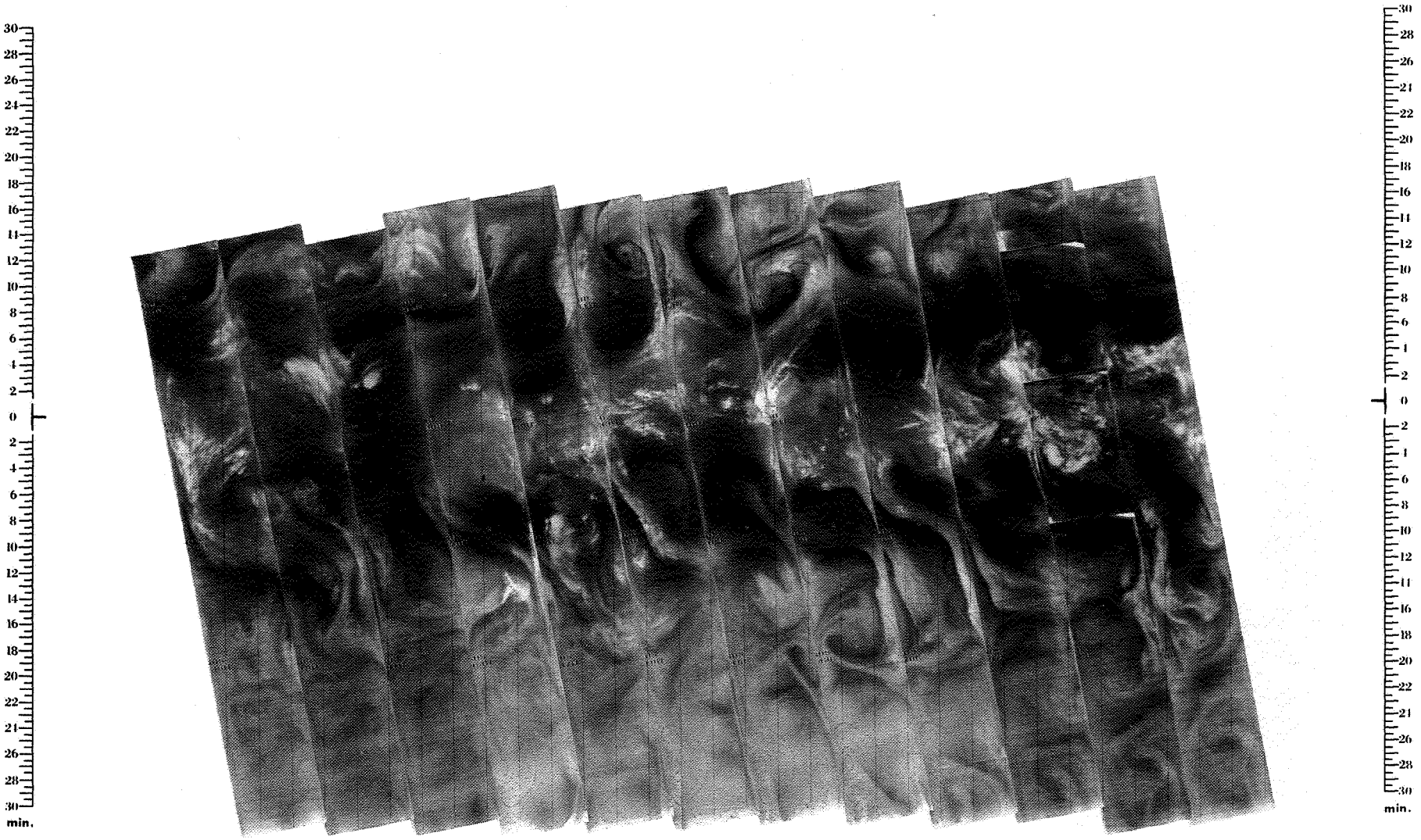
6.7 μm

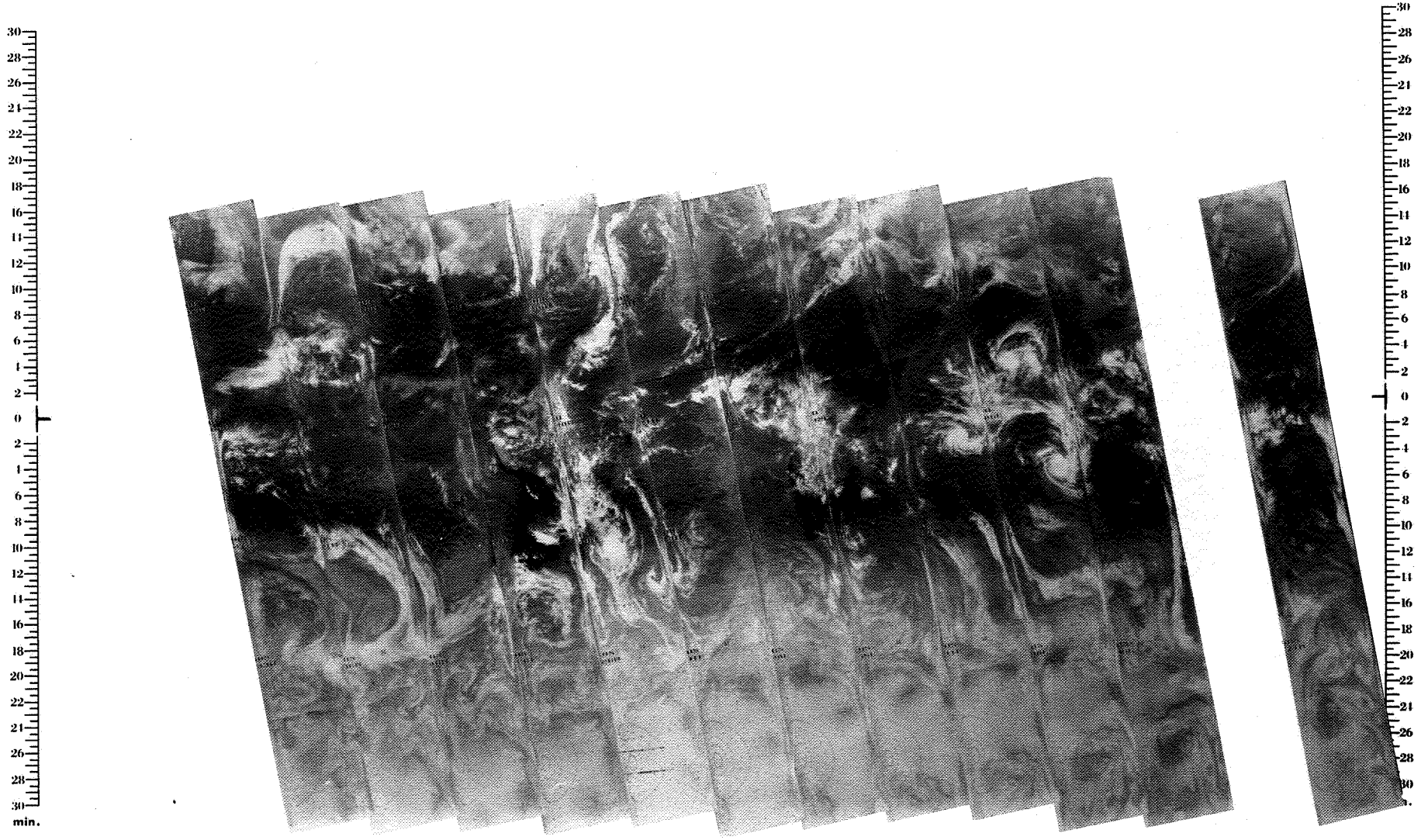


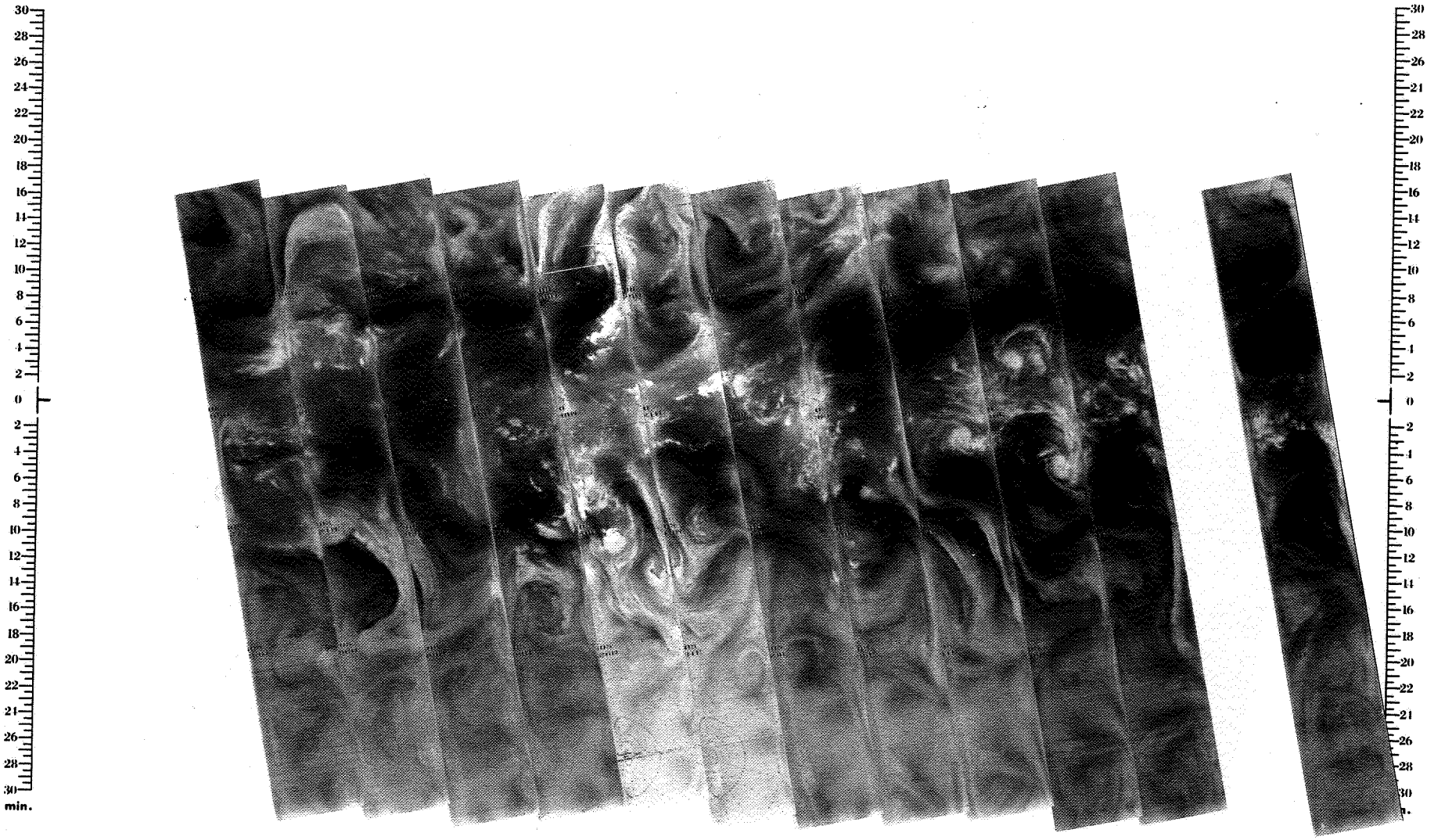
4935 4934 4933 4932 4931 4930 4929 4928 4927 4926 4925 4924 4923

13 DECEMBER 1973

11.5 μm

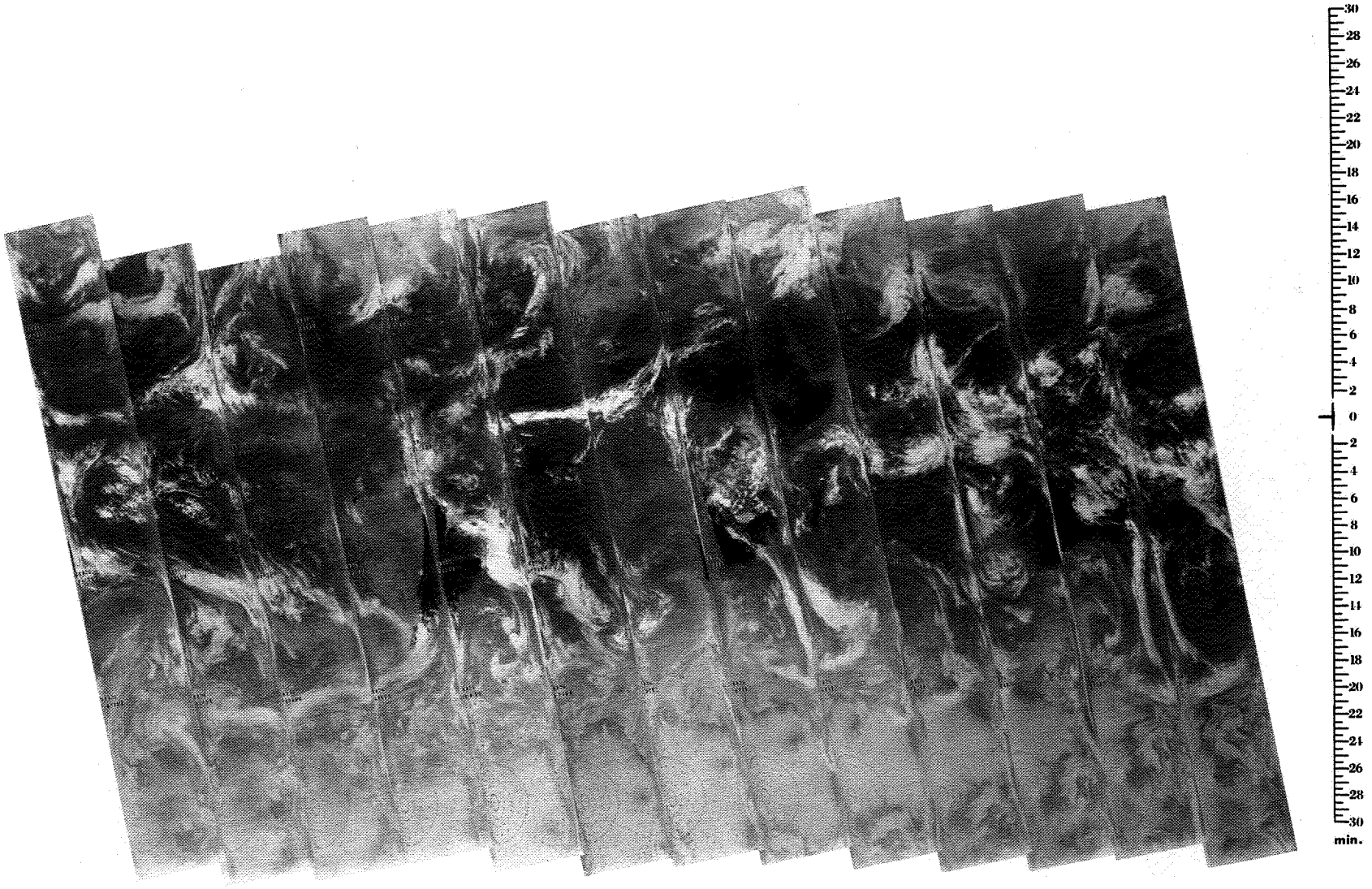

4935 4934 4933 4932 4931 4930 4929 4928 4927 4926 4925 4924 4923
13 DECEMBER 1973
6.7 μm
min.
min.


min.
4949
4948
4947
4946
4945
4944
4943
4942
4941
4940
4939
4938
4937
4936
14 DECEMBER 1973
11.5 μm



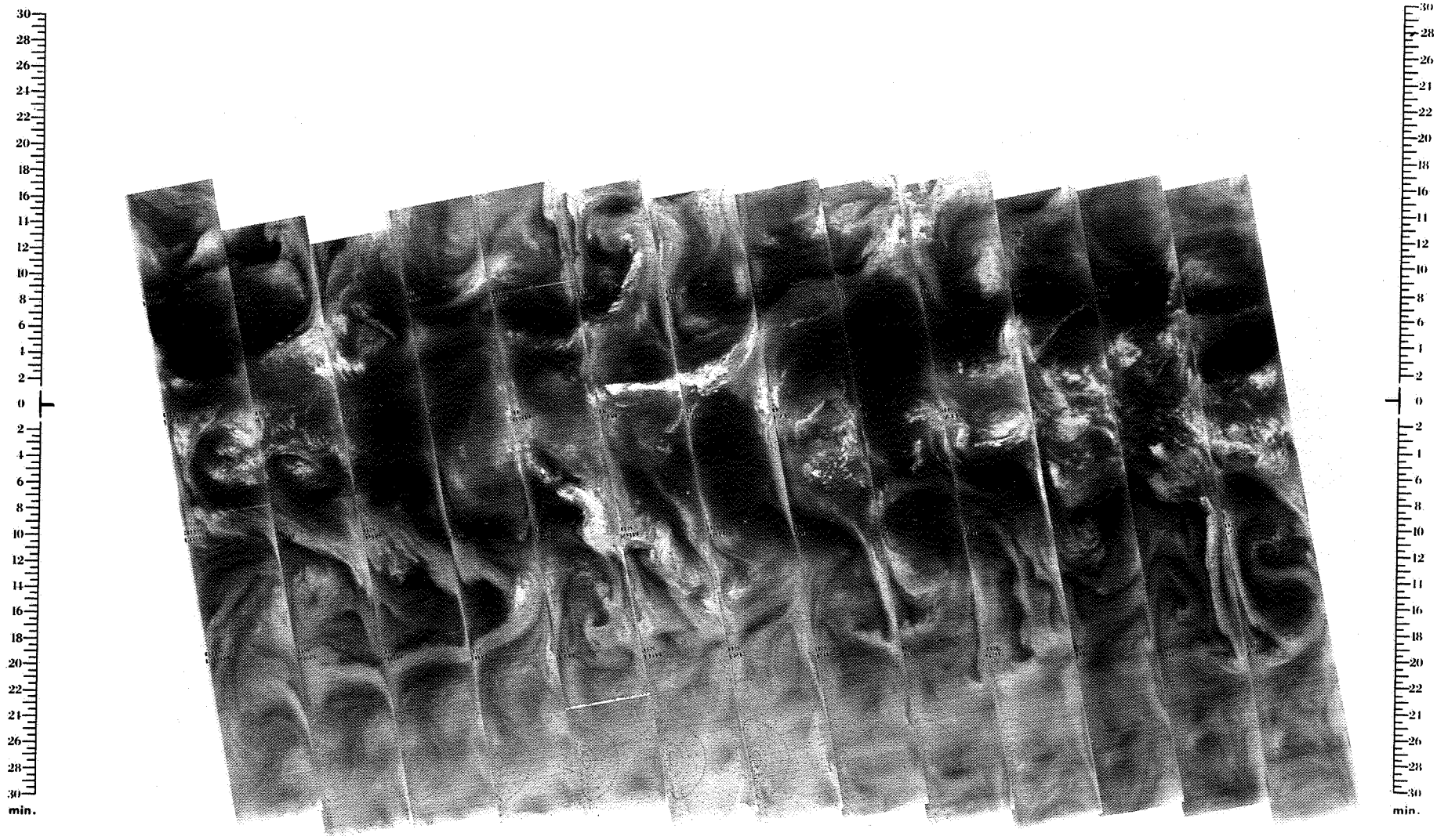
14 DECEMBER 1973

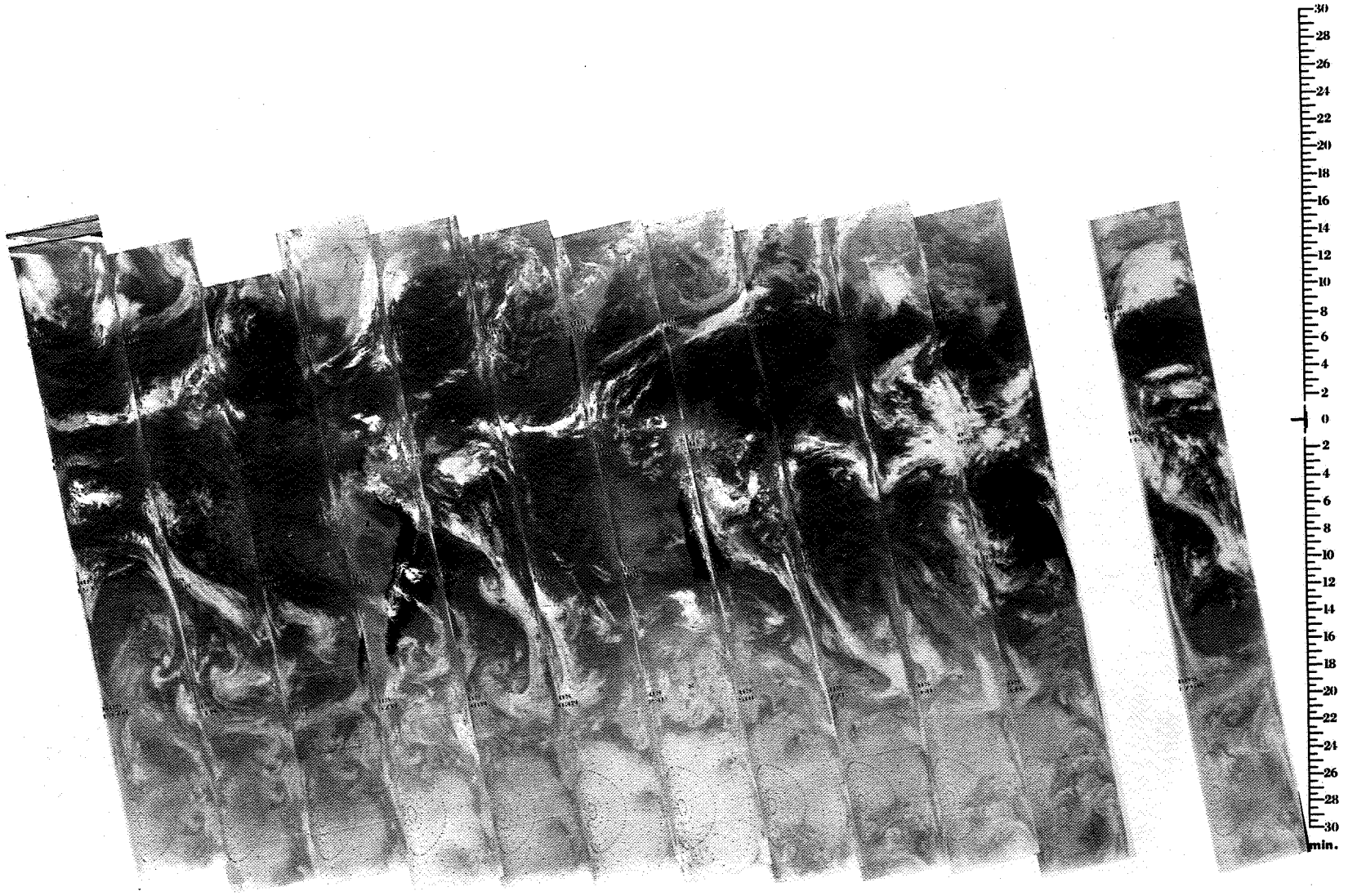
6.7 μm



15 DECEMBER 1973

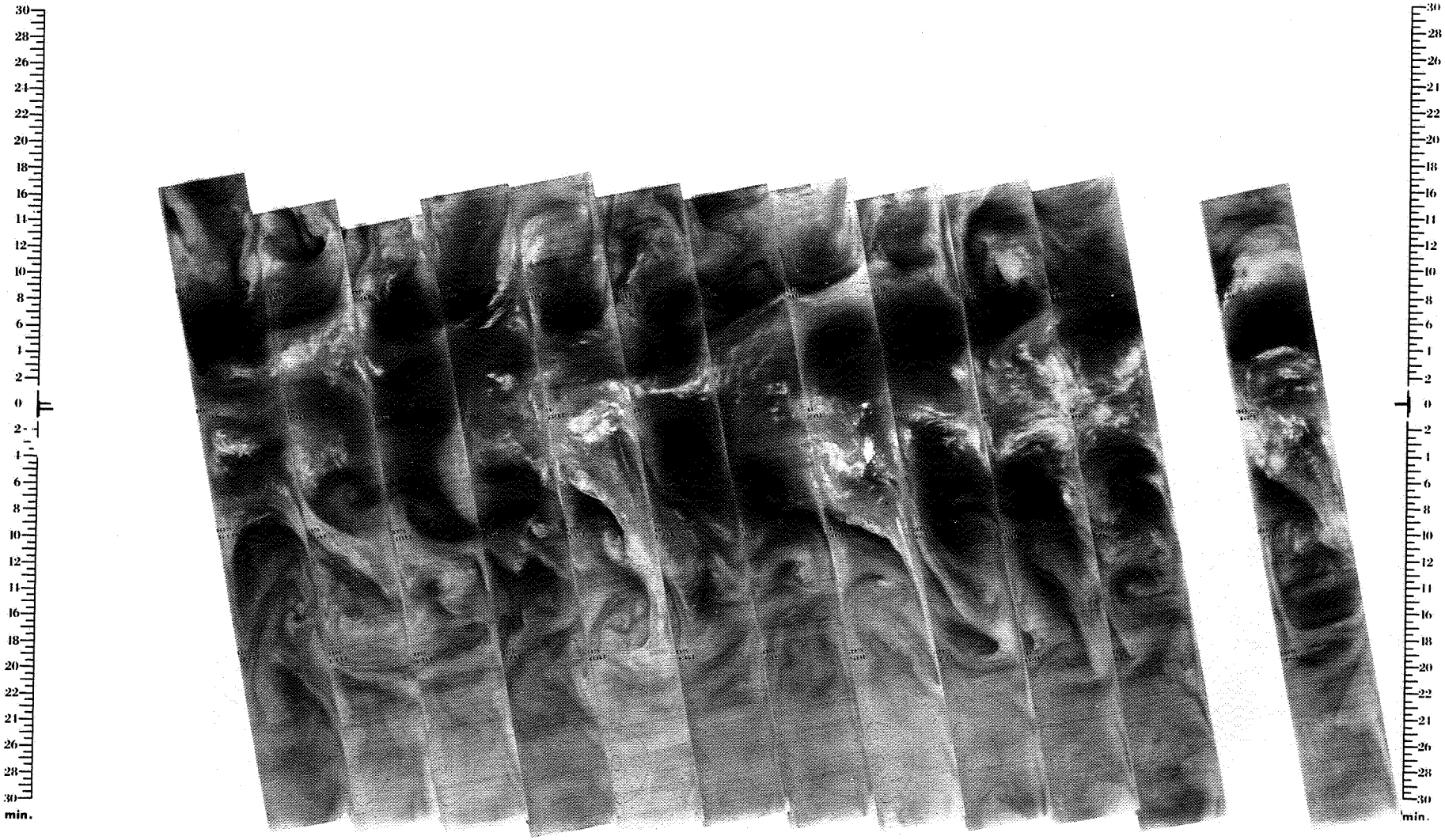
11.5 μm

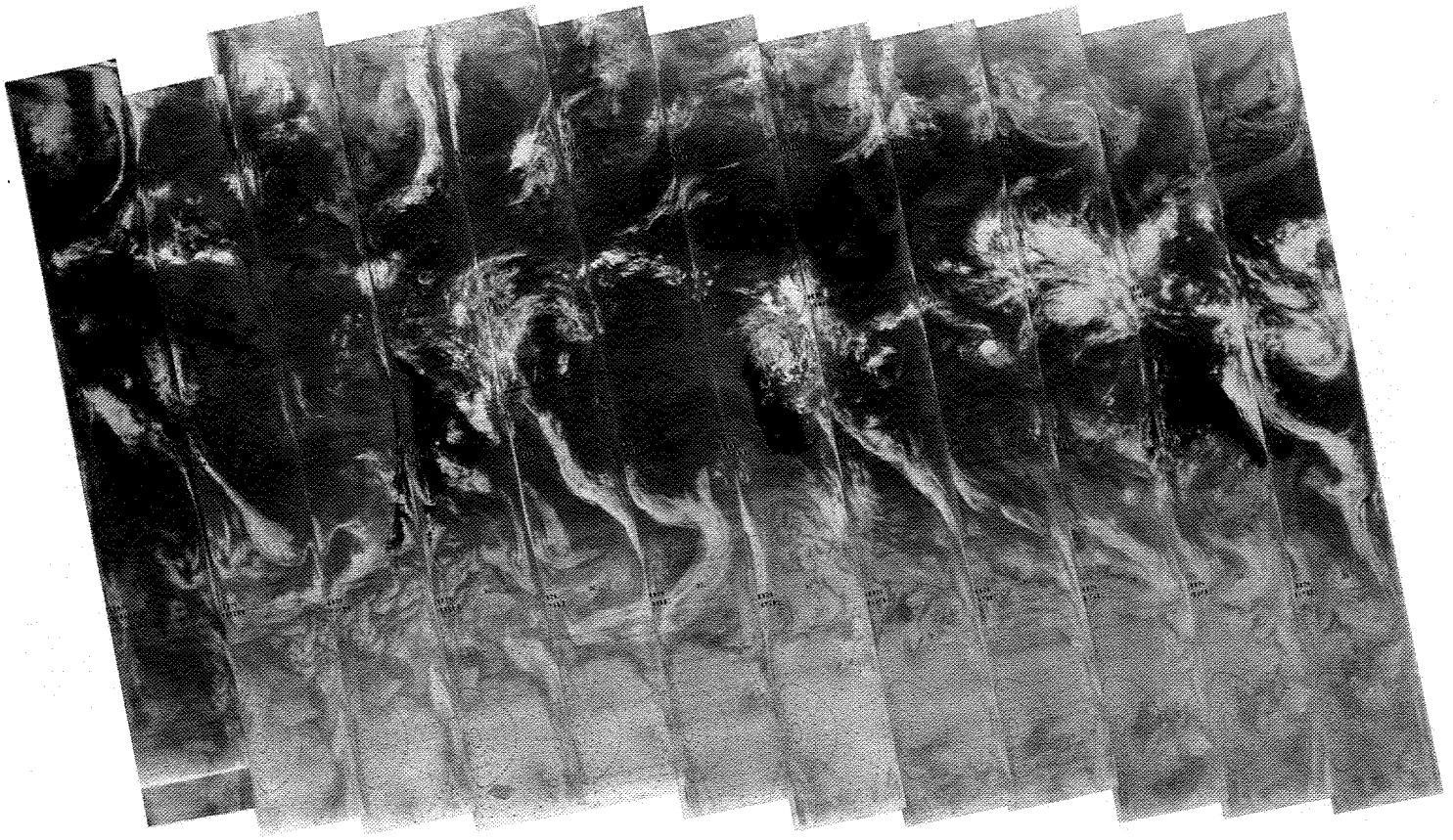

min.
min.
4962 4961 4960 4959 4958 4957 4956 4955 4954 4953 4952 4951 4950
15 DECEMBER 1973
6.7 μm



16 DECEMBER 1973

11.5 μm

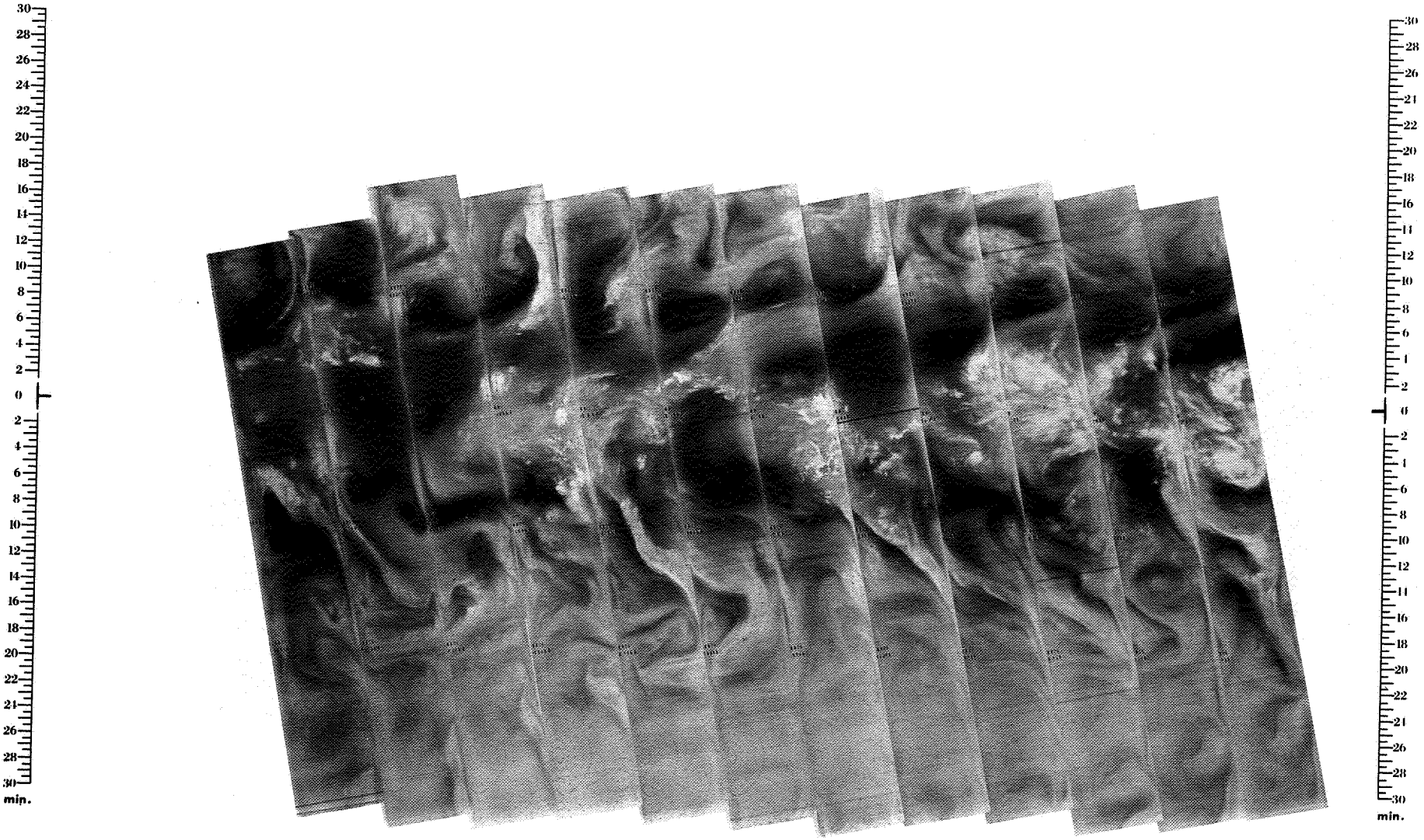

4976
4975
4974
4973
4972
4971
4970
4969
4968
4967
4966
4965
4964
4963
16 DECEMBER 1973
6.7 μm
min.
min.

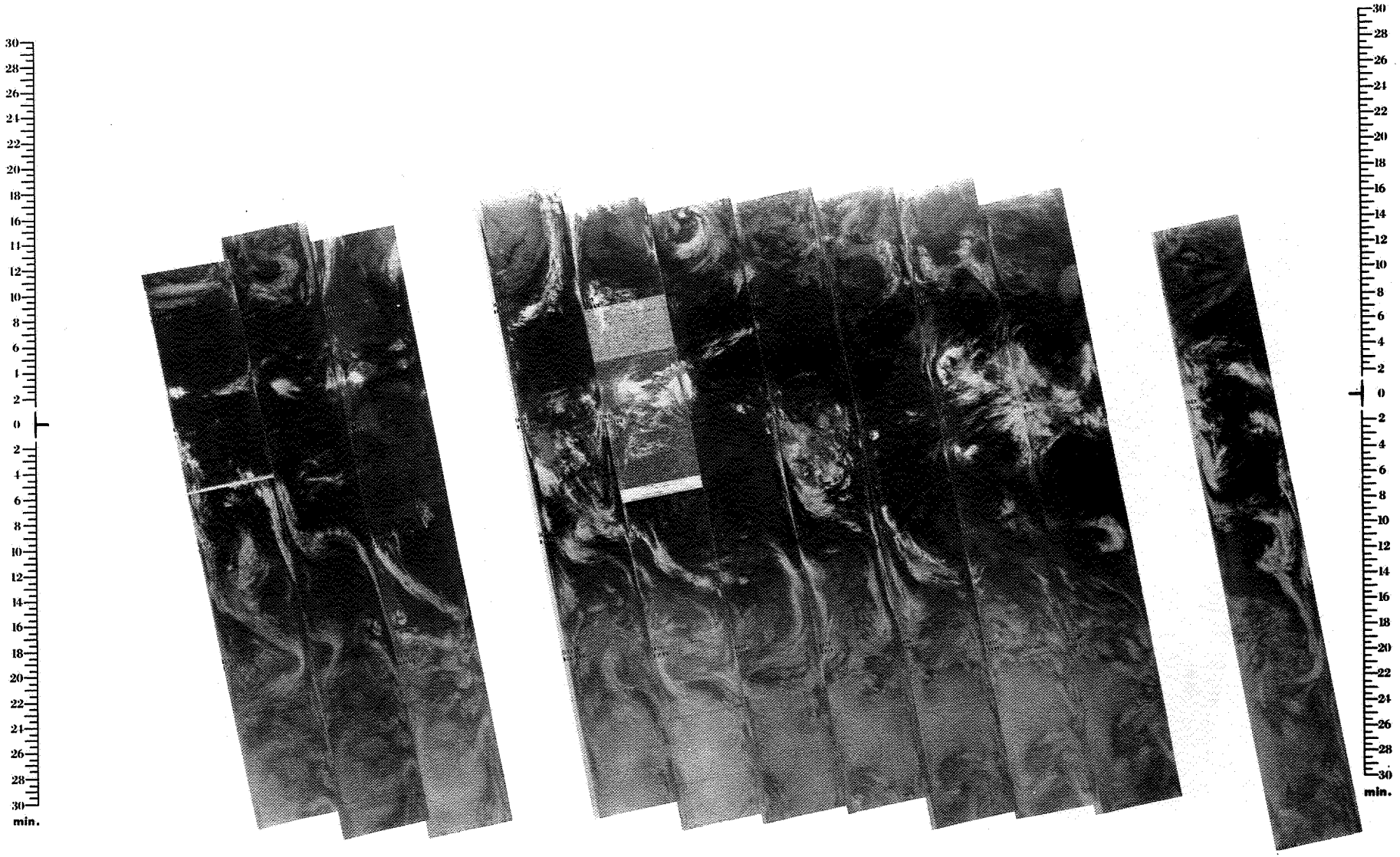


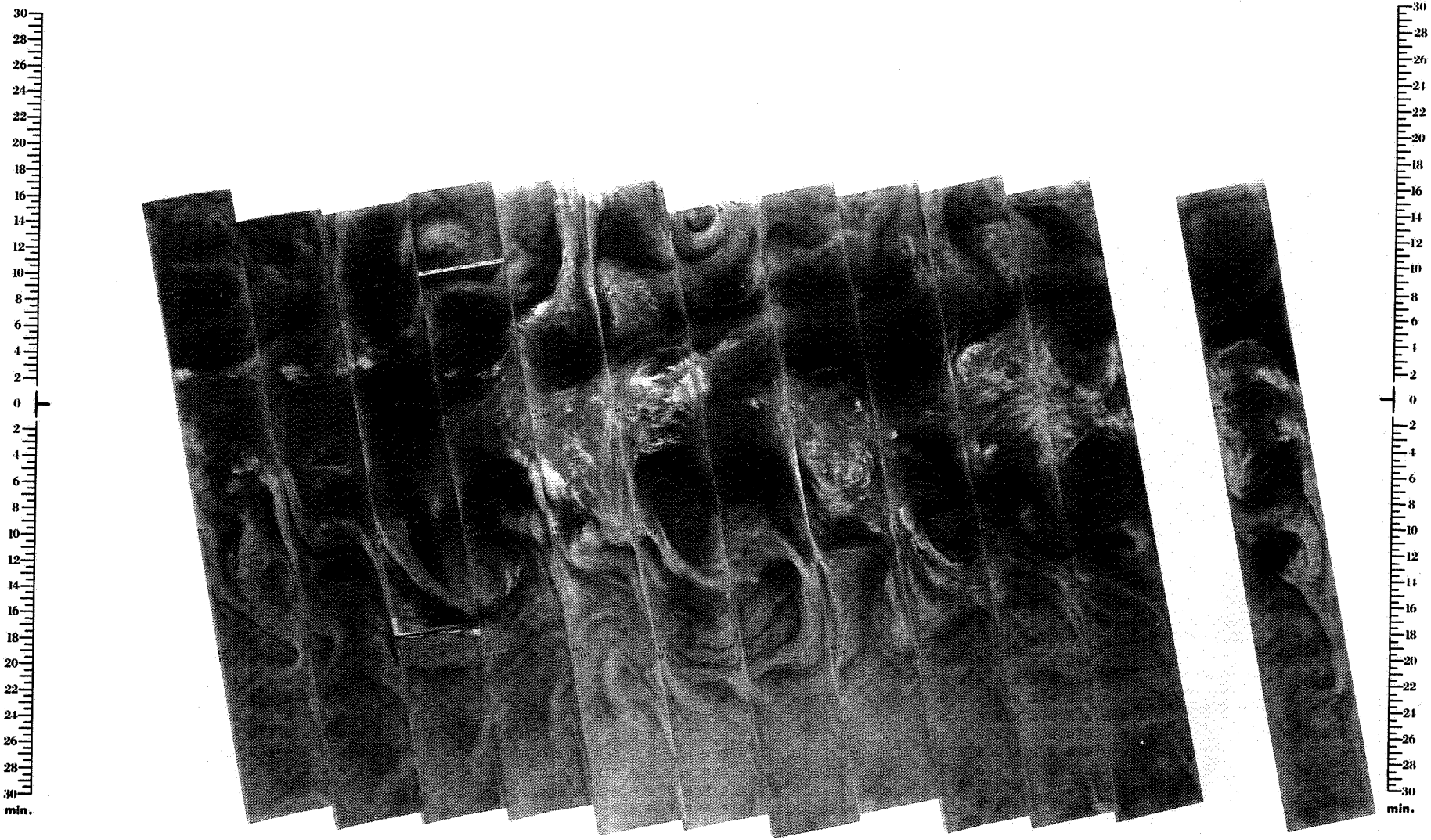
4989 4988 4987 4986 4985 4984 4983 4982 4981 4980 4979 4978 4977

17 DECEMBER 1973

11.5 μm

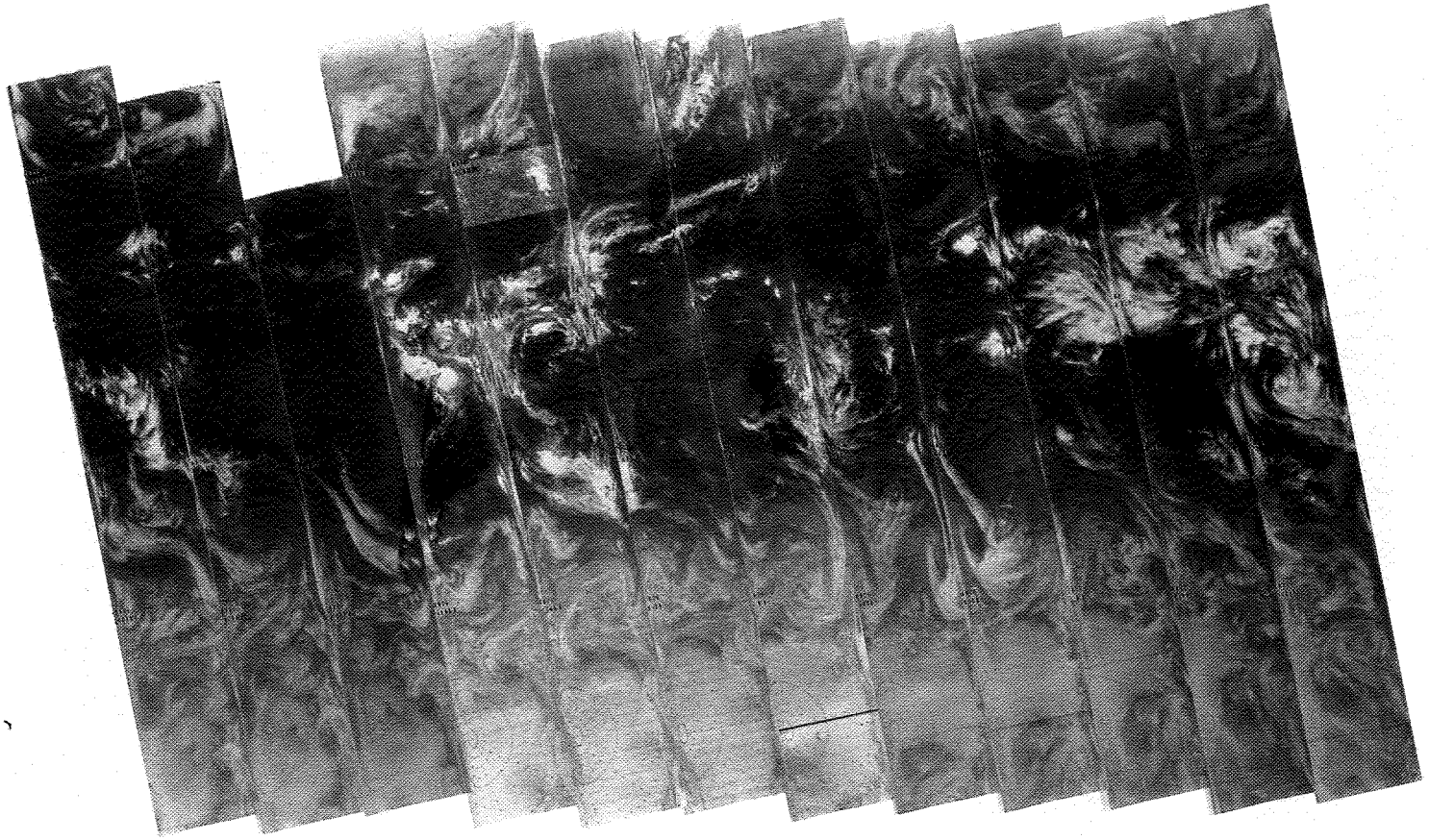

min.
min.
4989 4988 4987 4986 4985 4984 4983 4982 4981 4980 4979 4978 4977
17 DECEMBER 1973
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
5002 5001 5000 4999 4998 4997 4996 4995 4994 4993 4992 4991 4990
18 DECEMBER 1973
11.5 μm



18 DECEMBER 1973

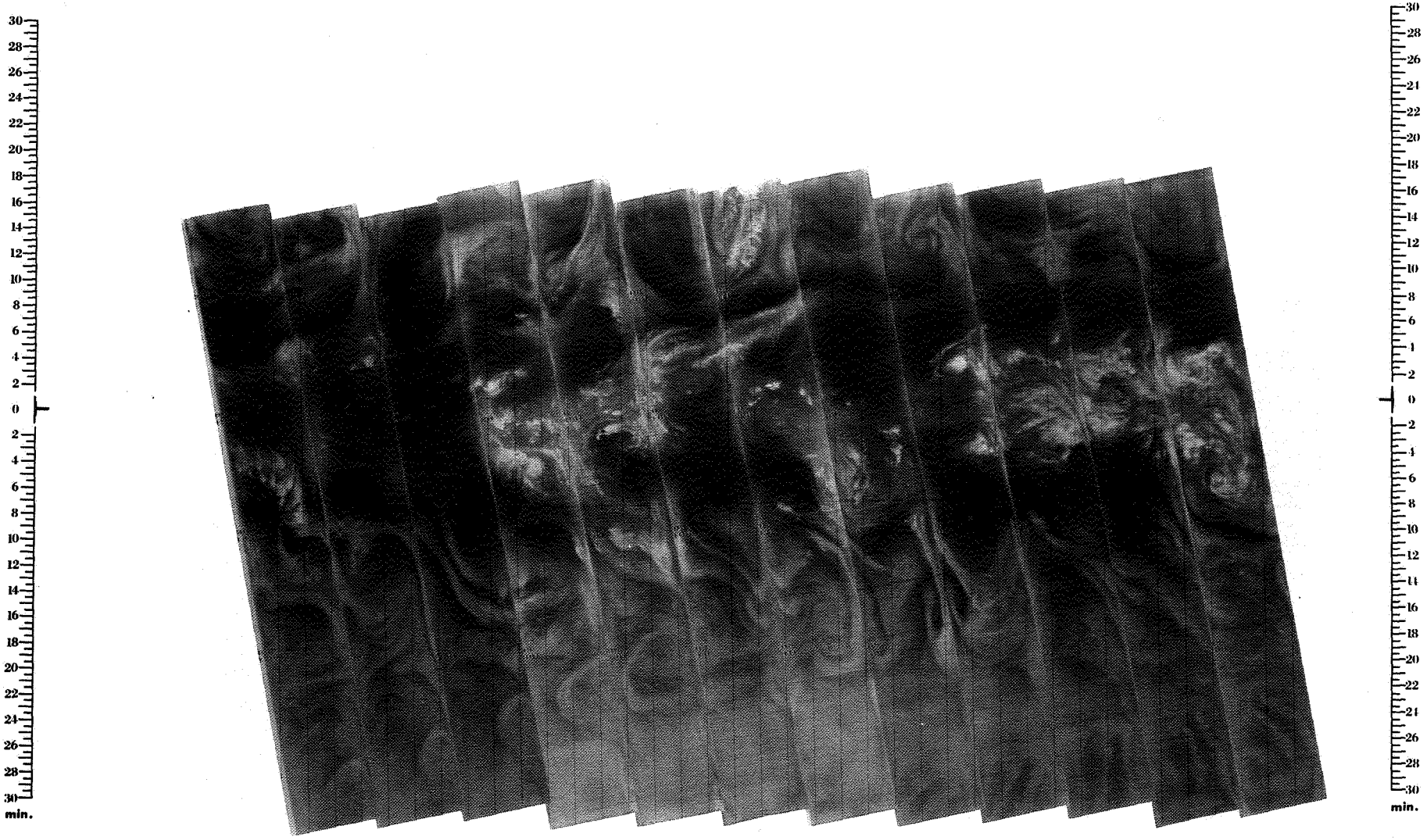
6.7 μm



5016 5015 5014 5013 5012 5011 5010 5009 5008 5007 5006 5005 5004 5003

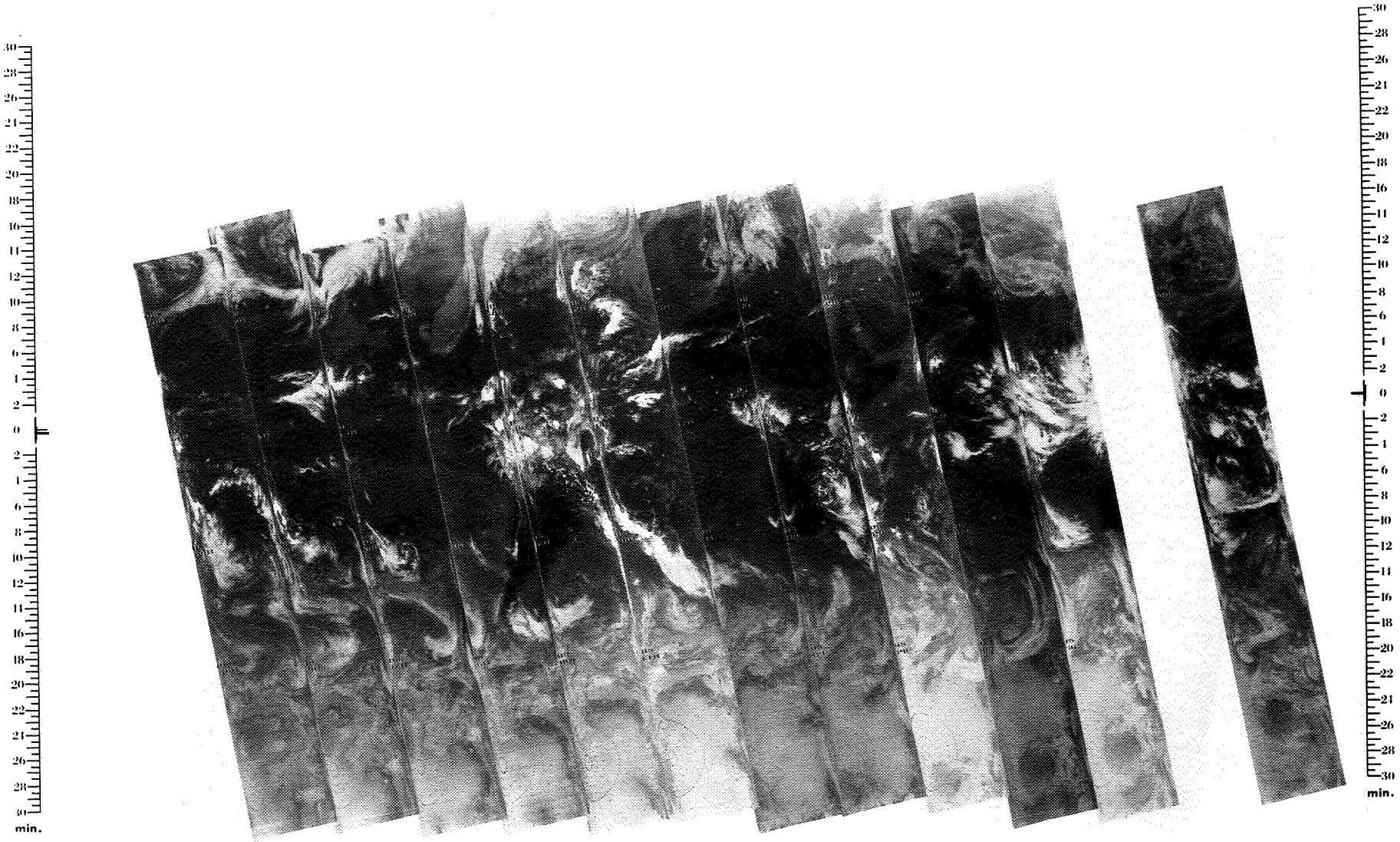
19 DECEMBER 1973

11.5 μm



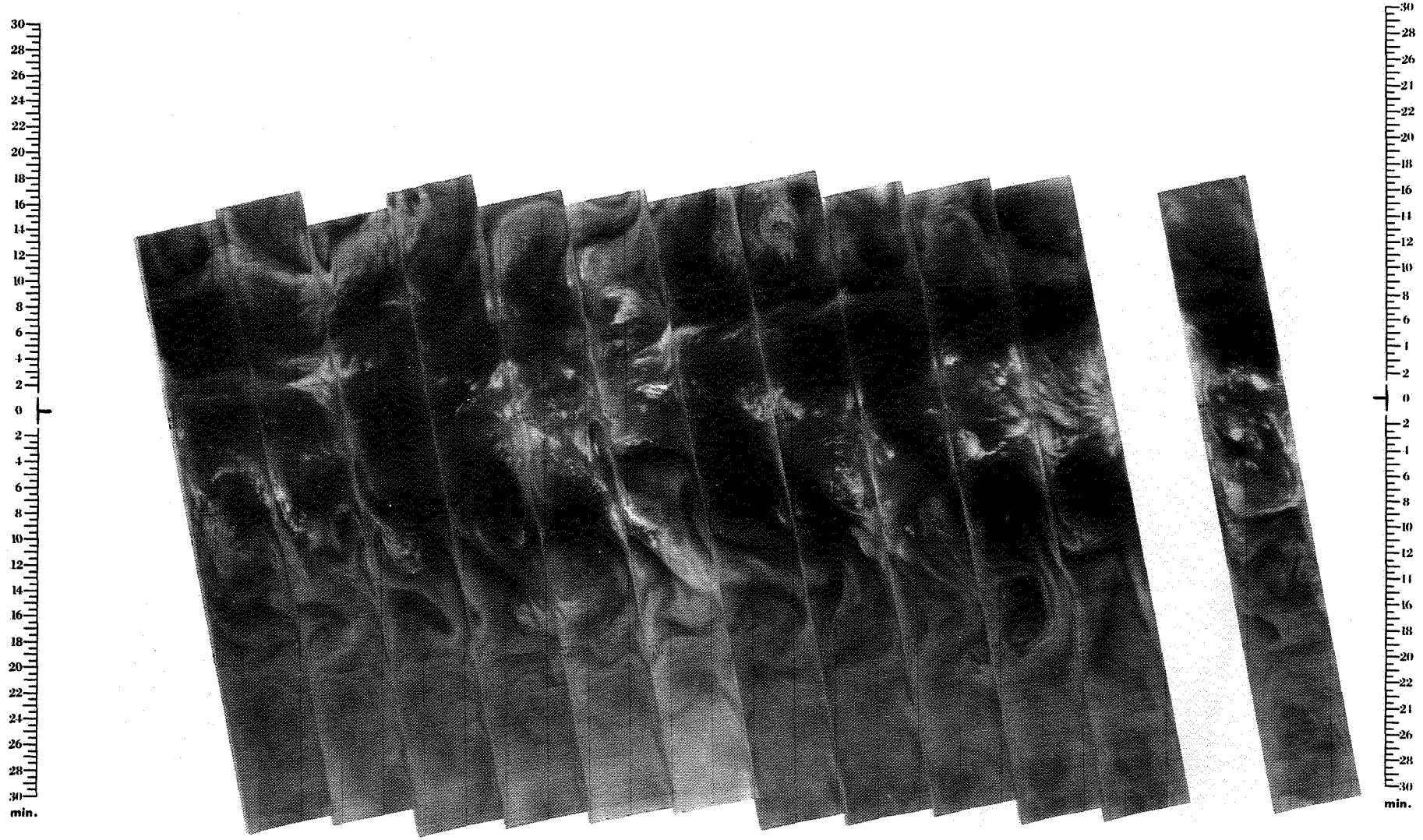
19 DECEMBER 1973

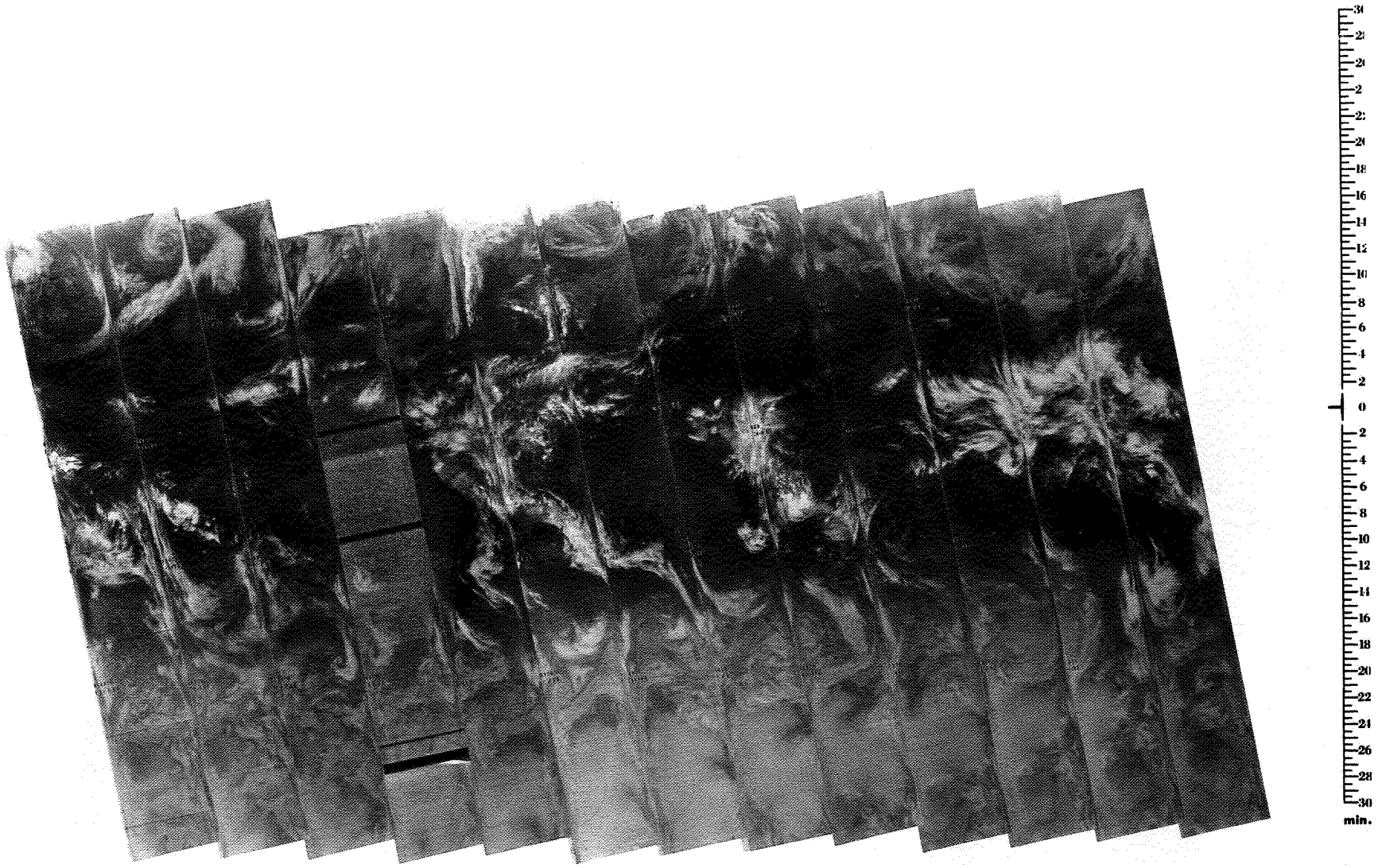
6.7 μm



20 DECEMBER 1973

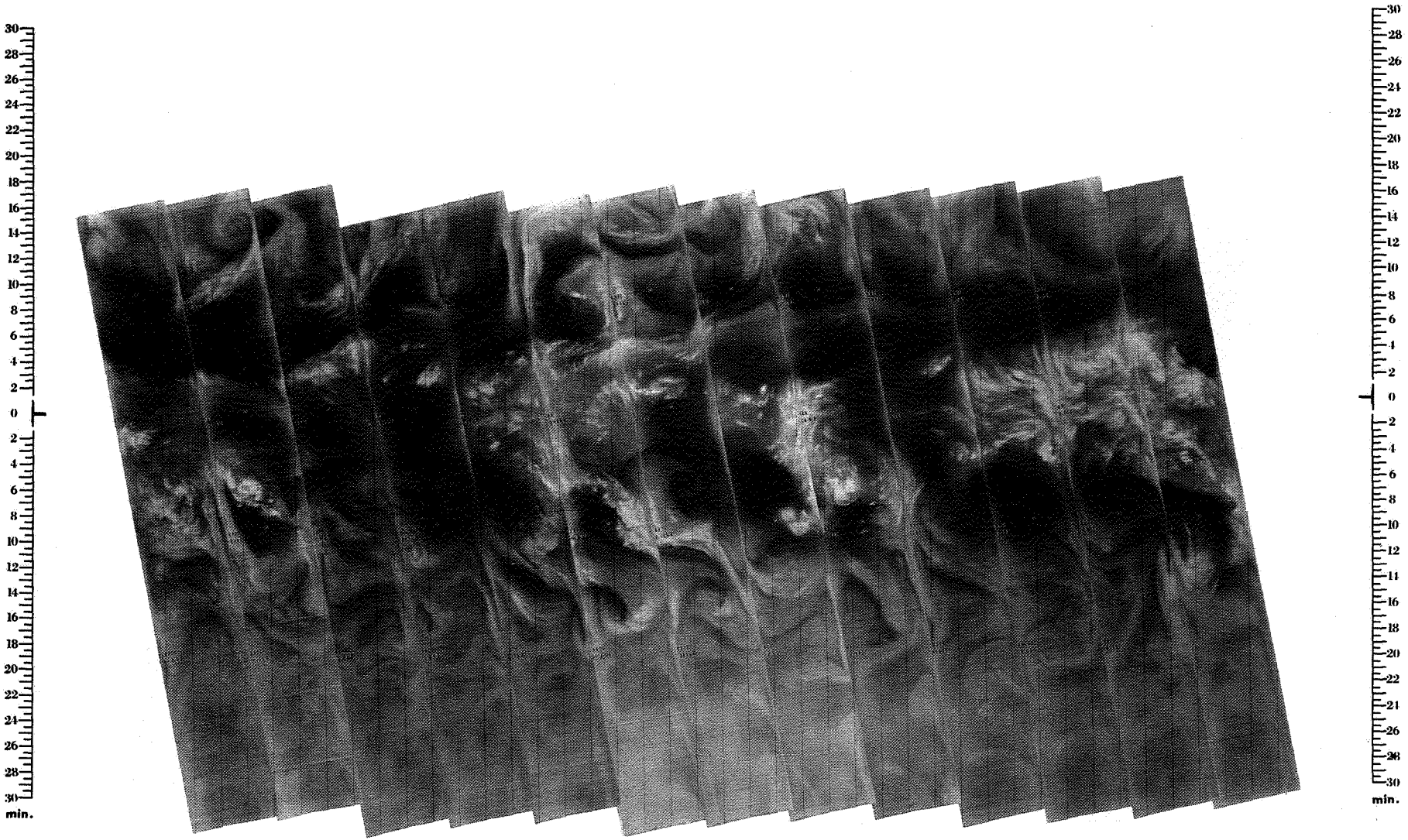
11.5 μm


min.
min.
5029
5028
5027
5026
5025
5024
5023
5022
5021
5020
5019
5018
5017
20 DECEMBER 1973
6.7 μm



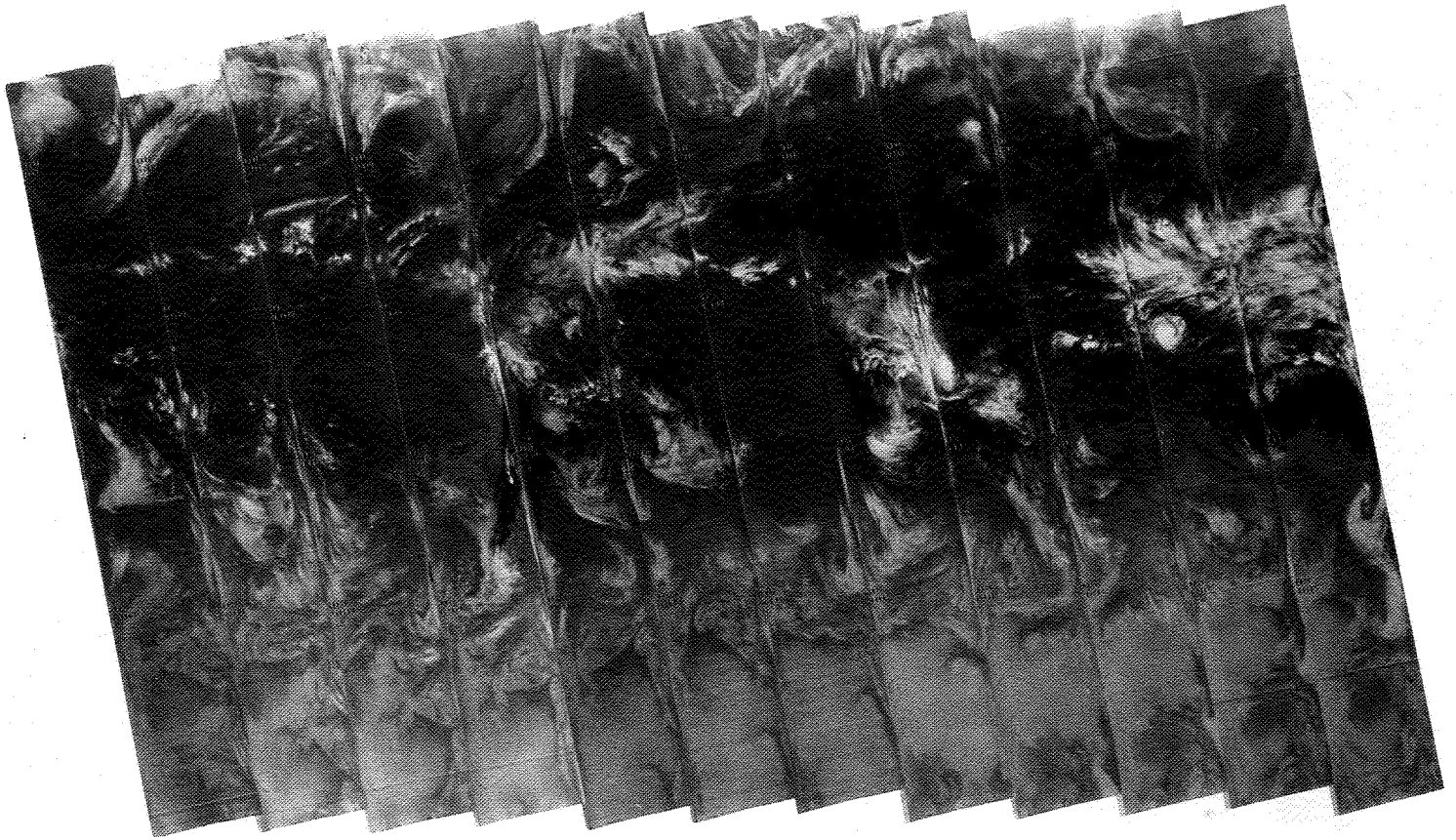
21 DECEMBER 1973

11.5 μm



21 DECEMBER 1973

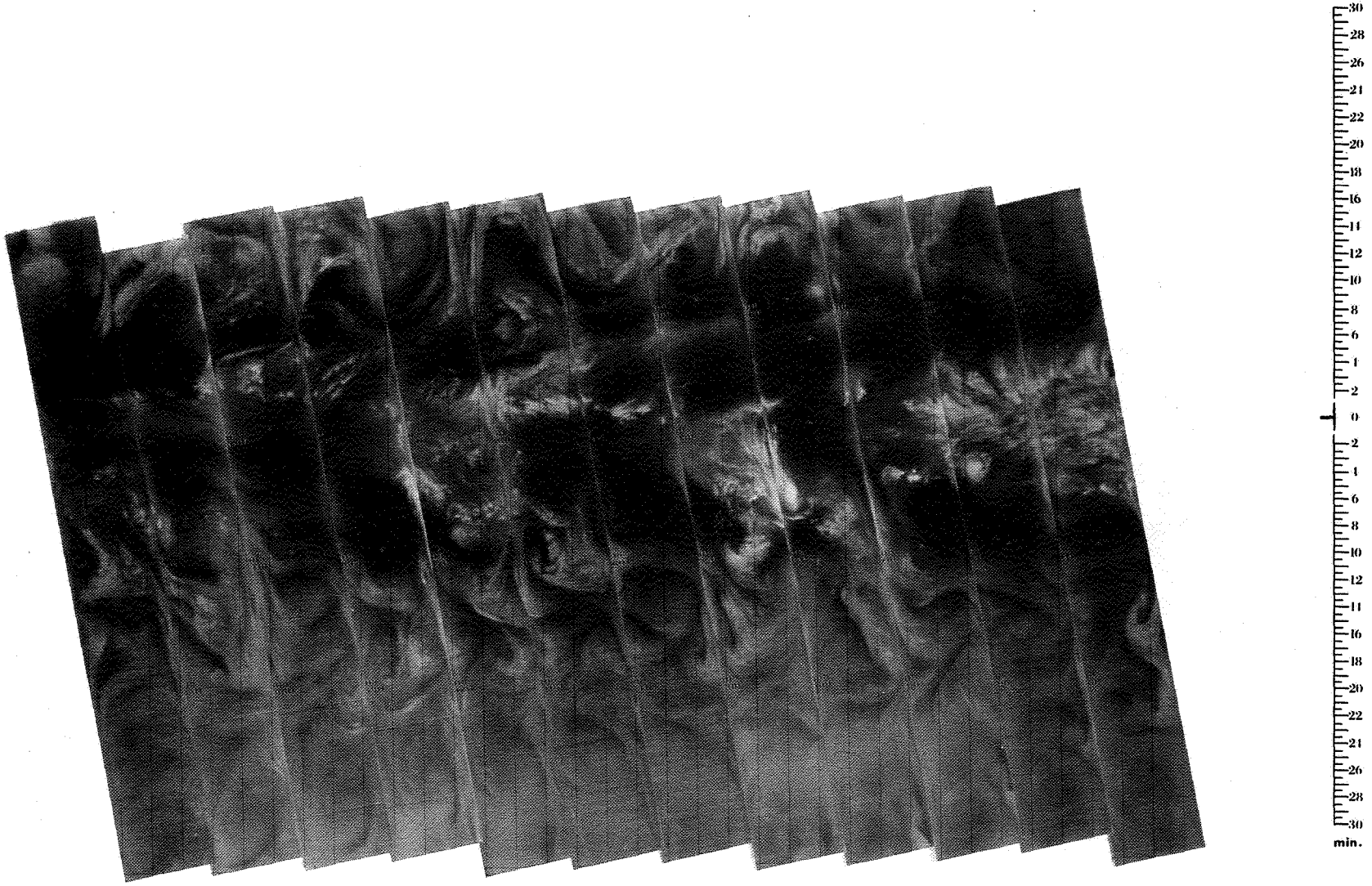
6.7 μm



5056 5055 5054 5053 5052 5051 5050 5049 5048 5047 5046 5045 5044

22 DECEMBER 1973

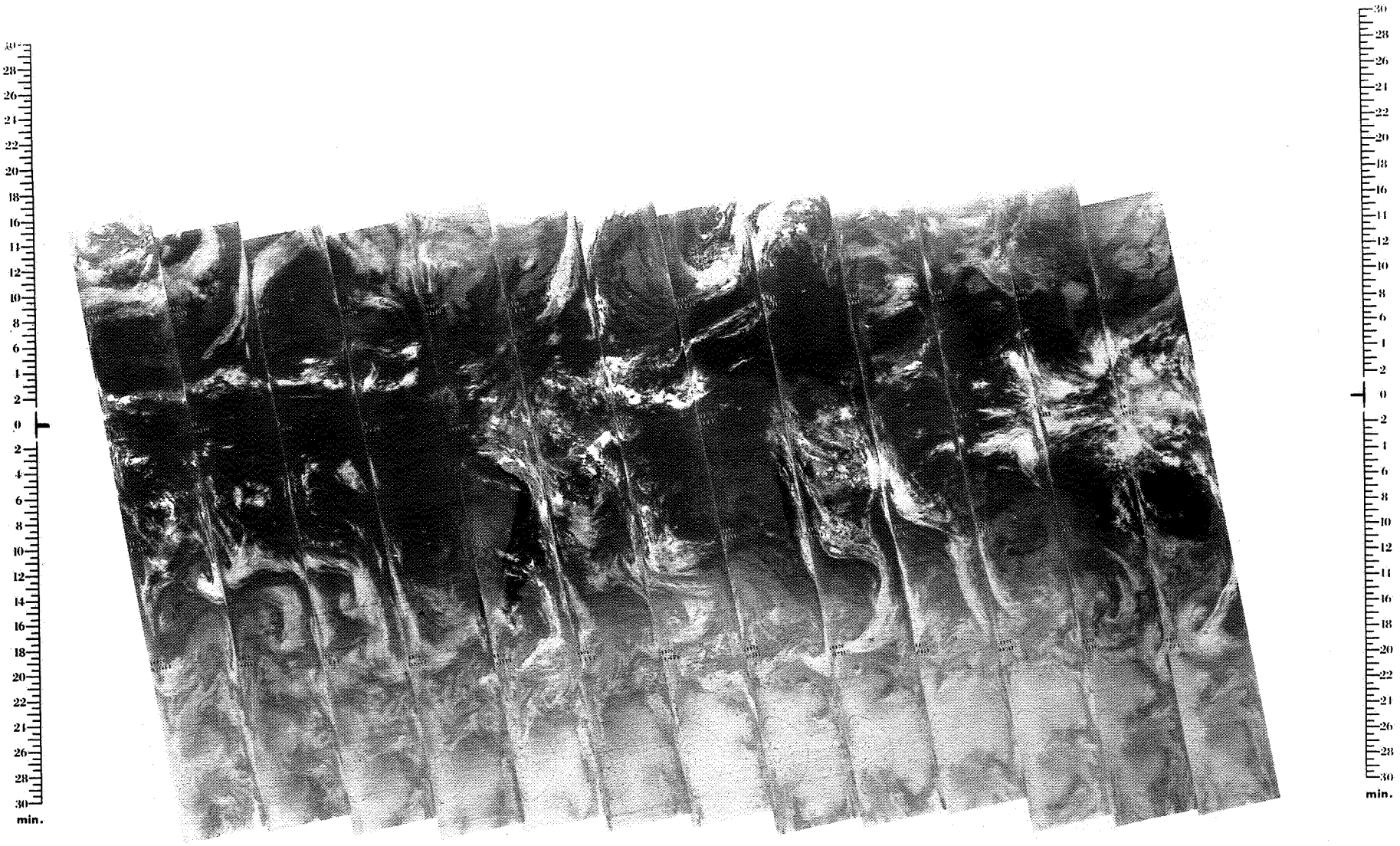
11.5 μm

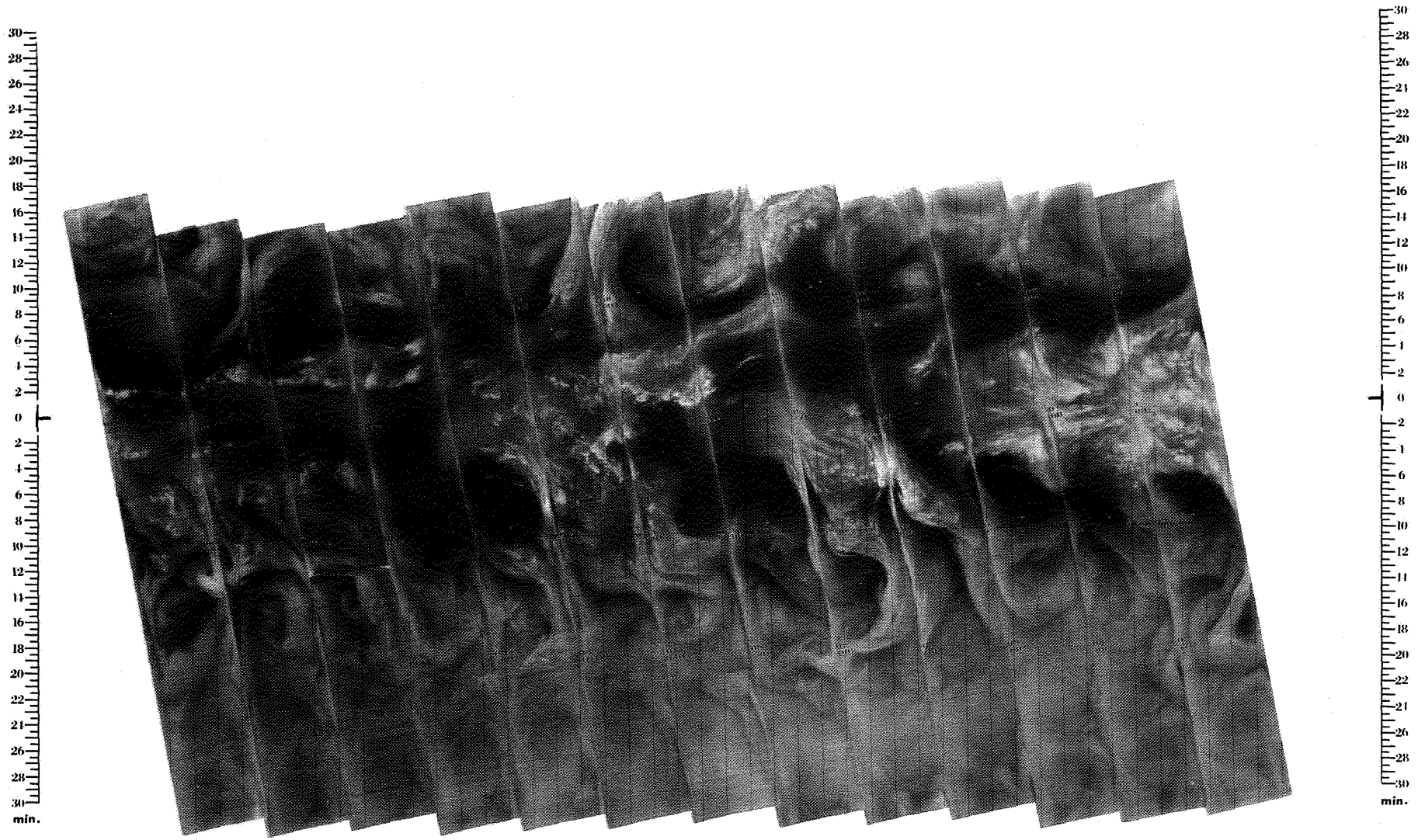


5056 5055 5054 5053 5052 5051 5050 5049 5048 5047 5046 5045 5044

22 DECEMBER 1973

6.7 μm


min.
min.
5070 5069 5068 5067 5066 5065 5064 5063 5062 5061 5060 5059 5058 5057
23 DECEMBER 1973
11.5 μm

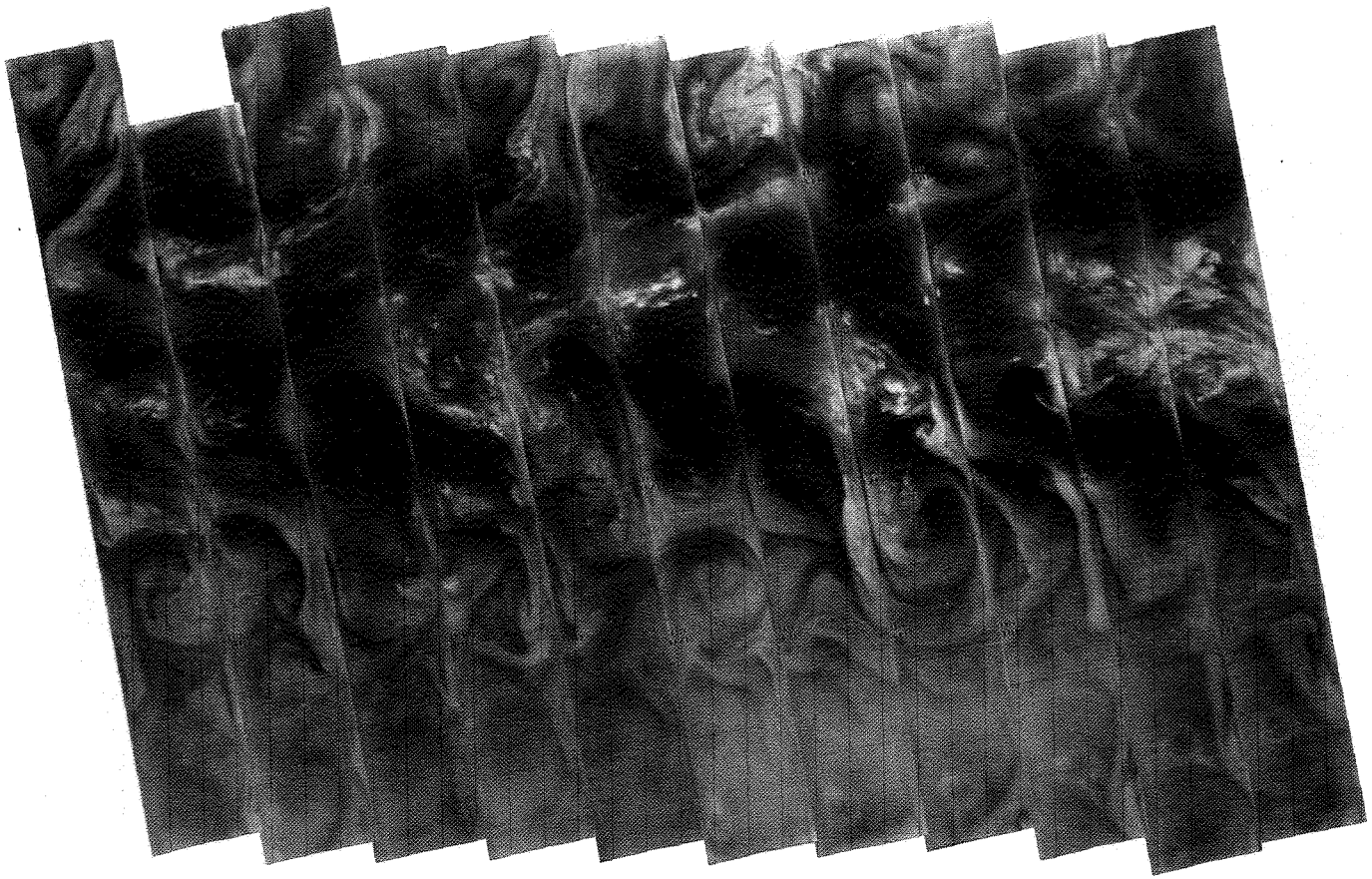


5070 5069 5068 5067 5066 5065 5064 5063 5062 5061 5060 5059 5058 5057

23 DECEMBER 1973

6.7 μm

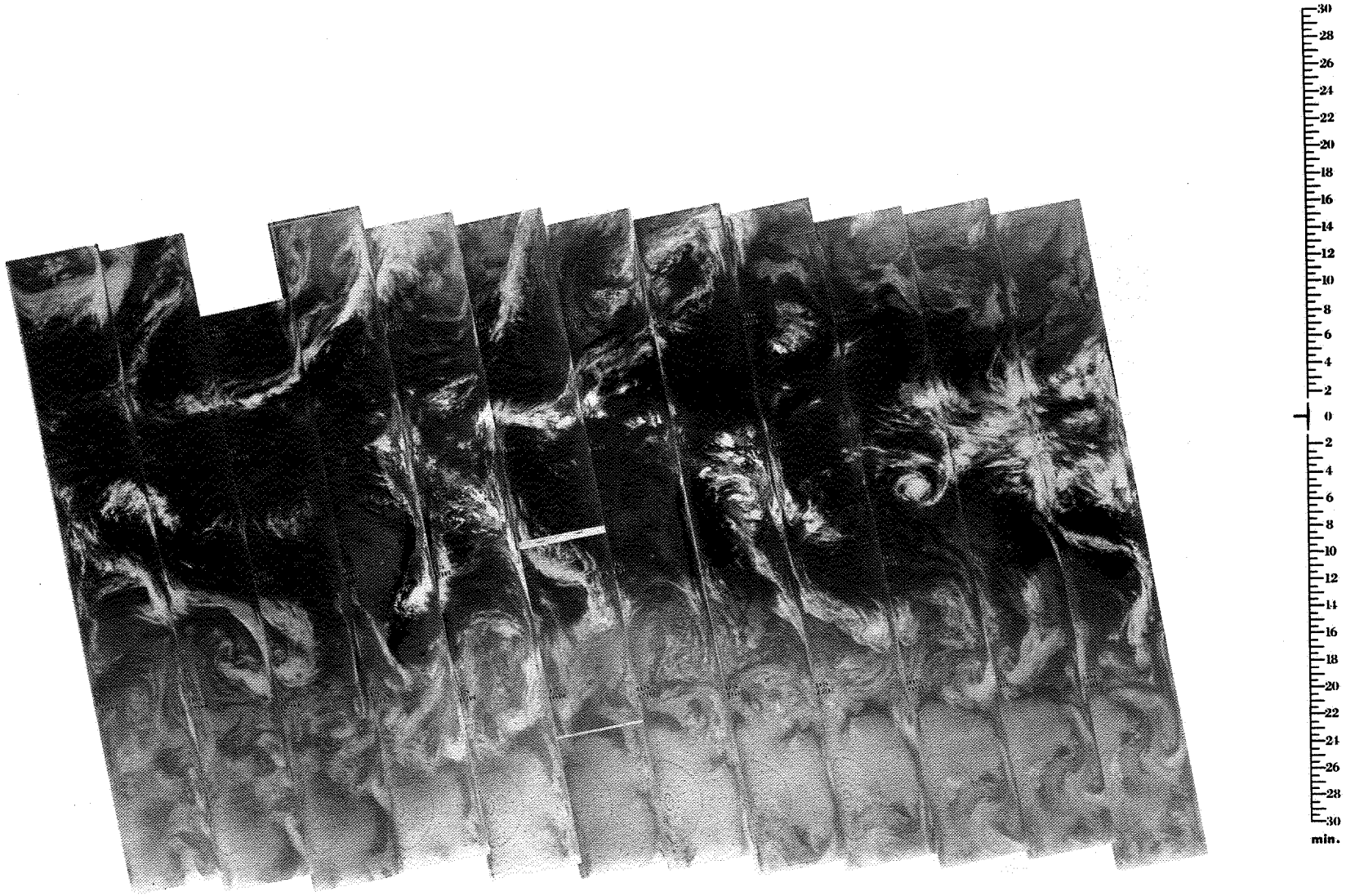
5071
5072
5073
5074
5075
5076
5077
5078
5079
5080
5081
5082
5083
24 DECEMBER 1973
11.5 μm



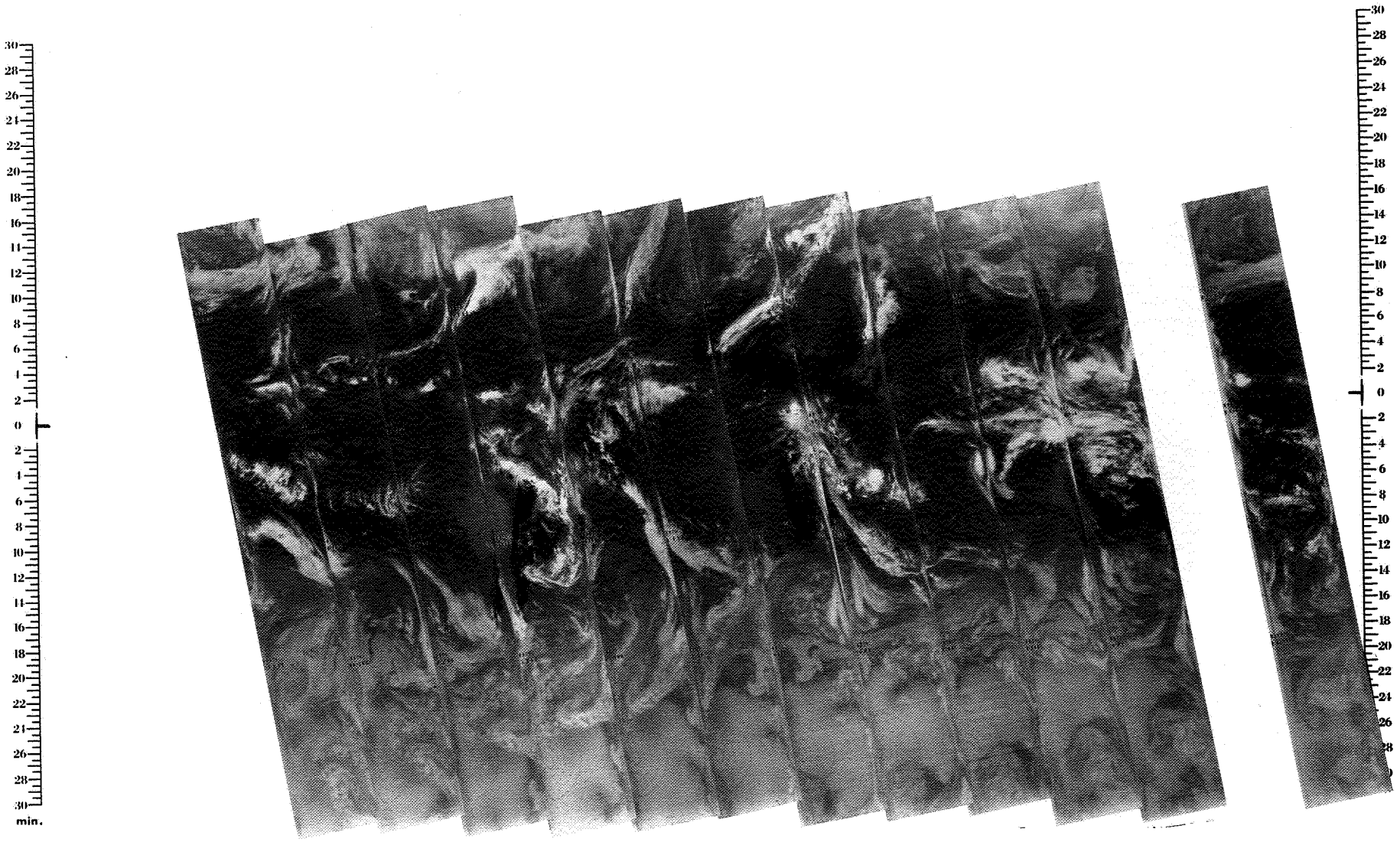
5083 5082 5081 5080 5079 5078 5077 5076 5075 5074 5073 5072 5071

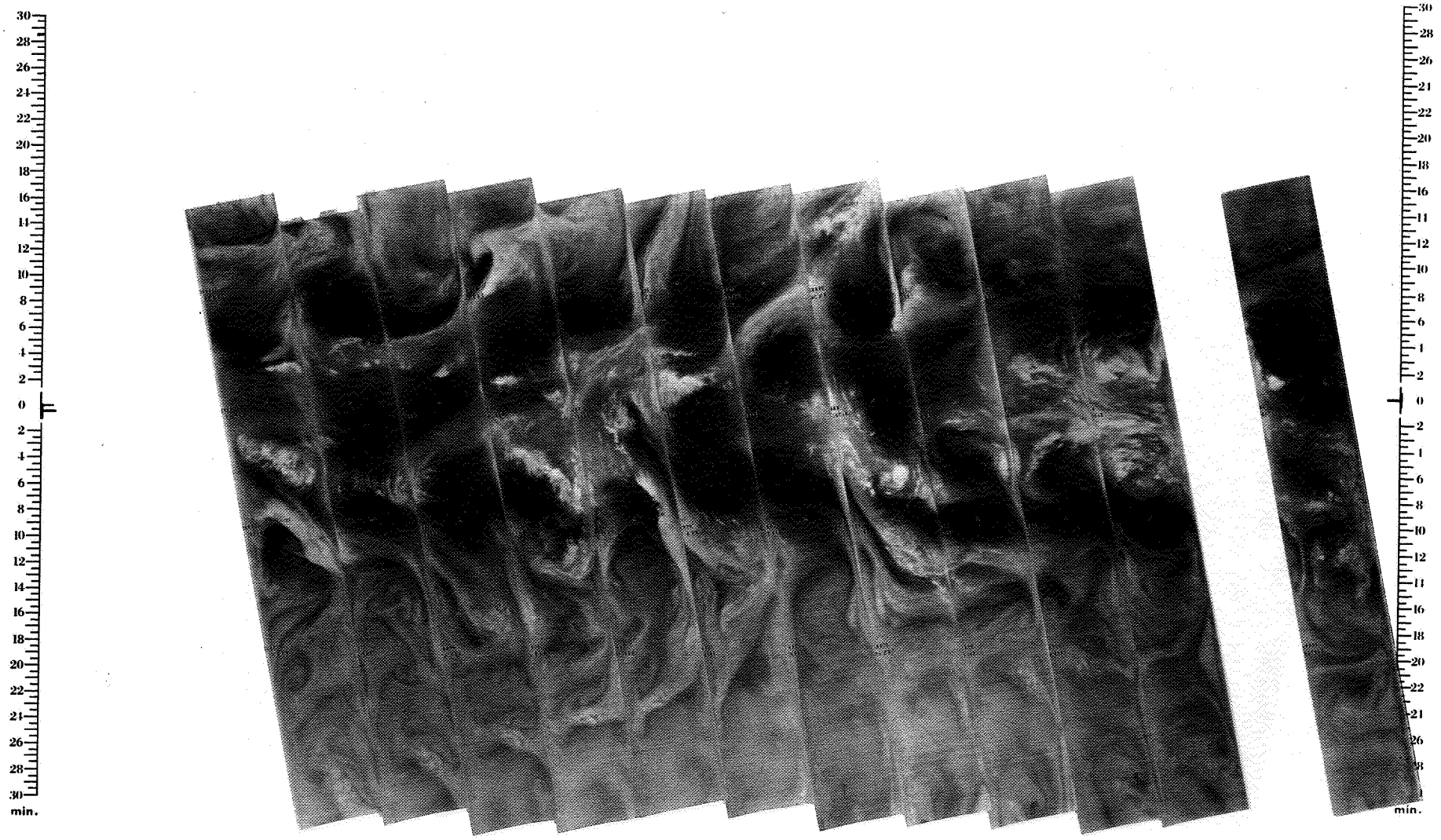
24 DECEMBER 1973

6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
5096 5095 5094 5093 5092 5091 5090 5089 5088 5087 5086 5085 5084
25 DECEMBER 1973
11.5 μm

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.
5084
5085
5086
5087
5088
5089
5090
5091
5092
5093
5094
5095
5096
25 DECEMBER 1973
6.7 μm
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.

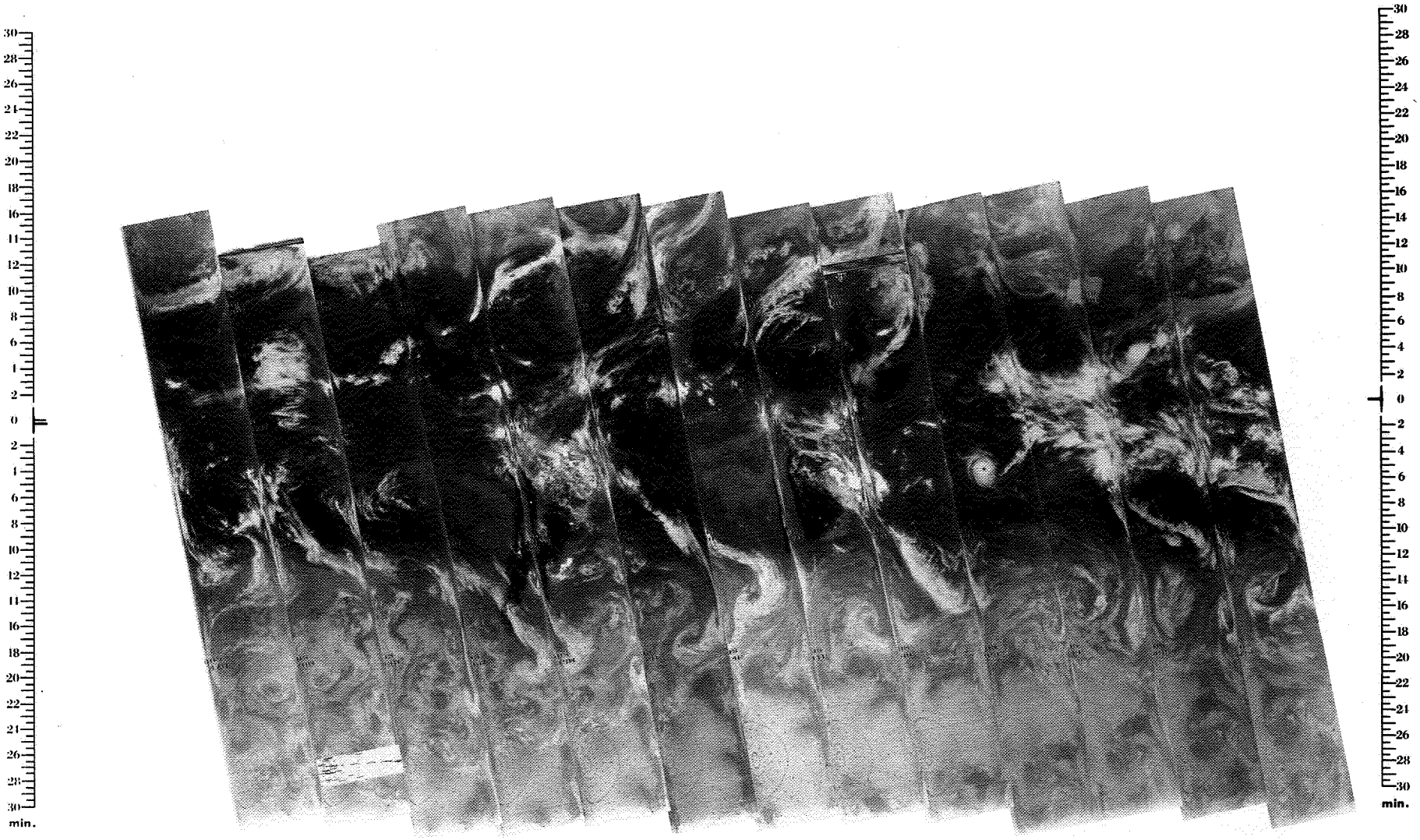

min.
5110 5109 5108 5107 5106 5105 5104 5103 5102 5101 5100 5099 5098 5097
26 DECEMBER 1973
11.5 μm



5110 5109 5108 5107 5106 5105 5104 5103 5102 5101 5100 5099 5098 5097

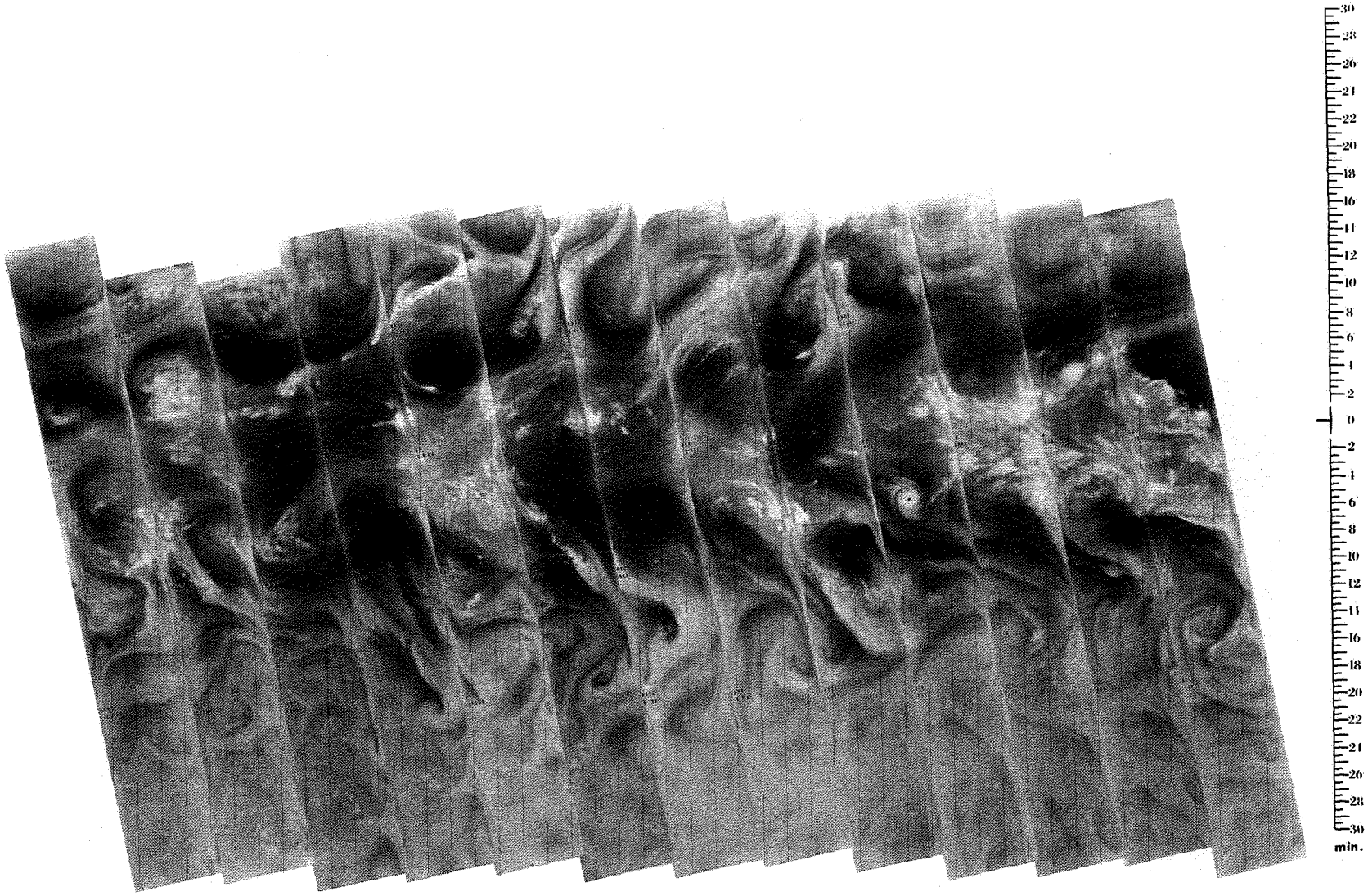
26 DECEMBER 1973

6.7 μm



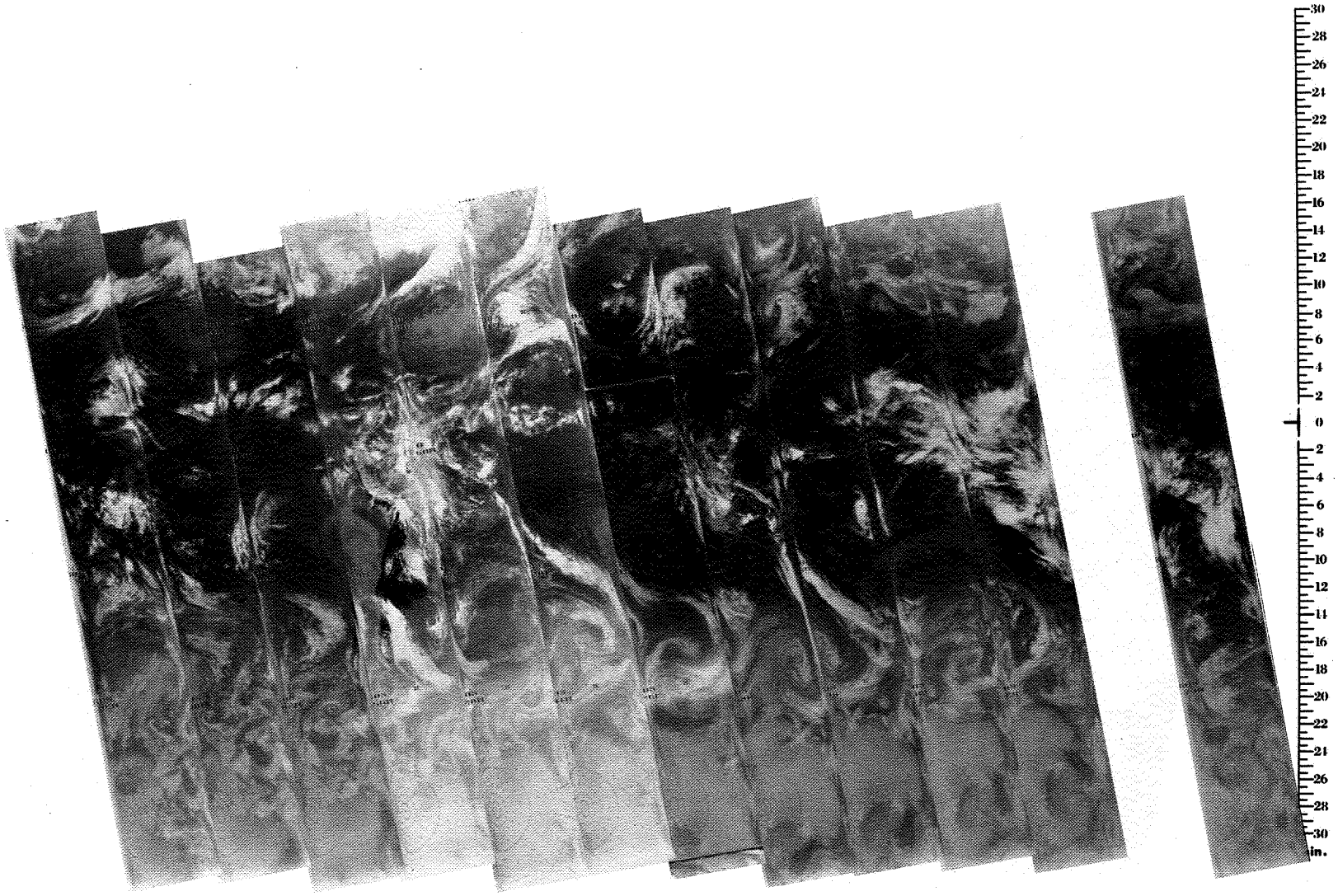
27 DECEMBER 1973

11.5 μm



27 DECEMBER 1973

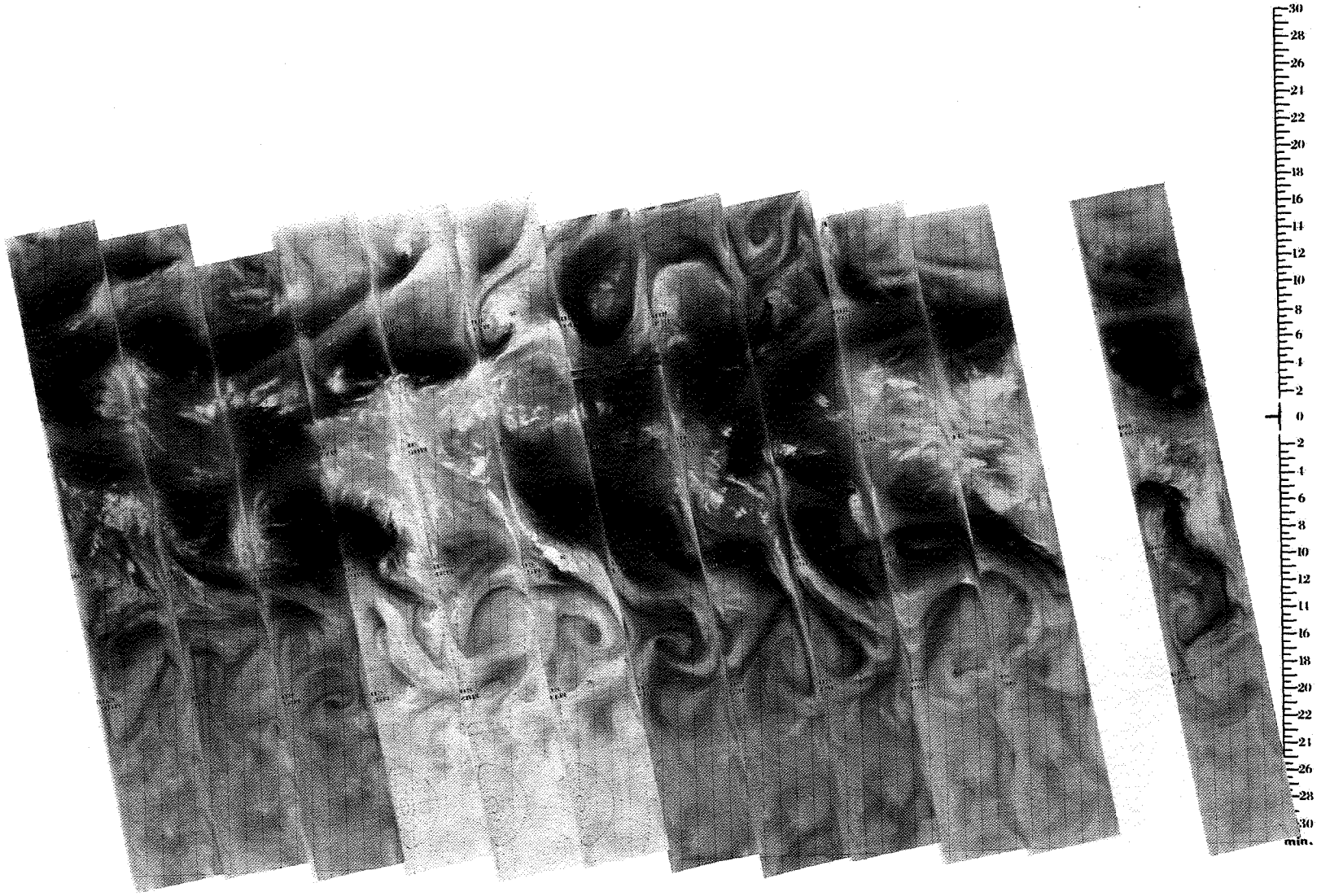
6.7 μm



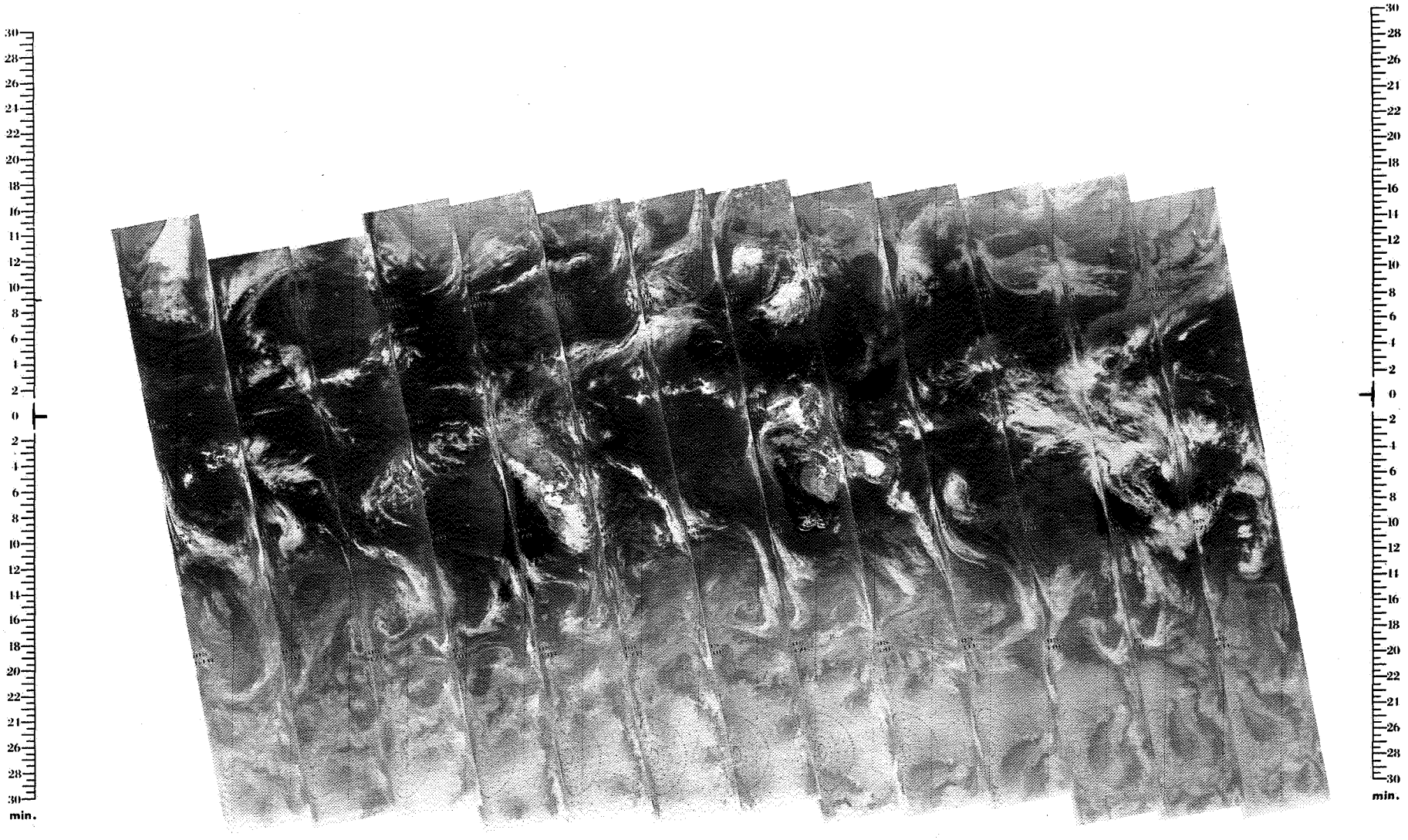
5137 5136 5135 5134 5133 5132 5131 5130 5129 5128 5127 5126 5125 5124

28 DECEMBER 1973

11.5 μm



28 DECEMBER 1973
6.7 μm

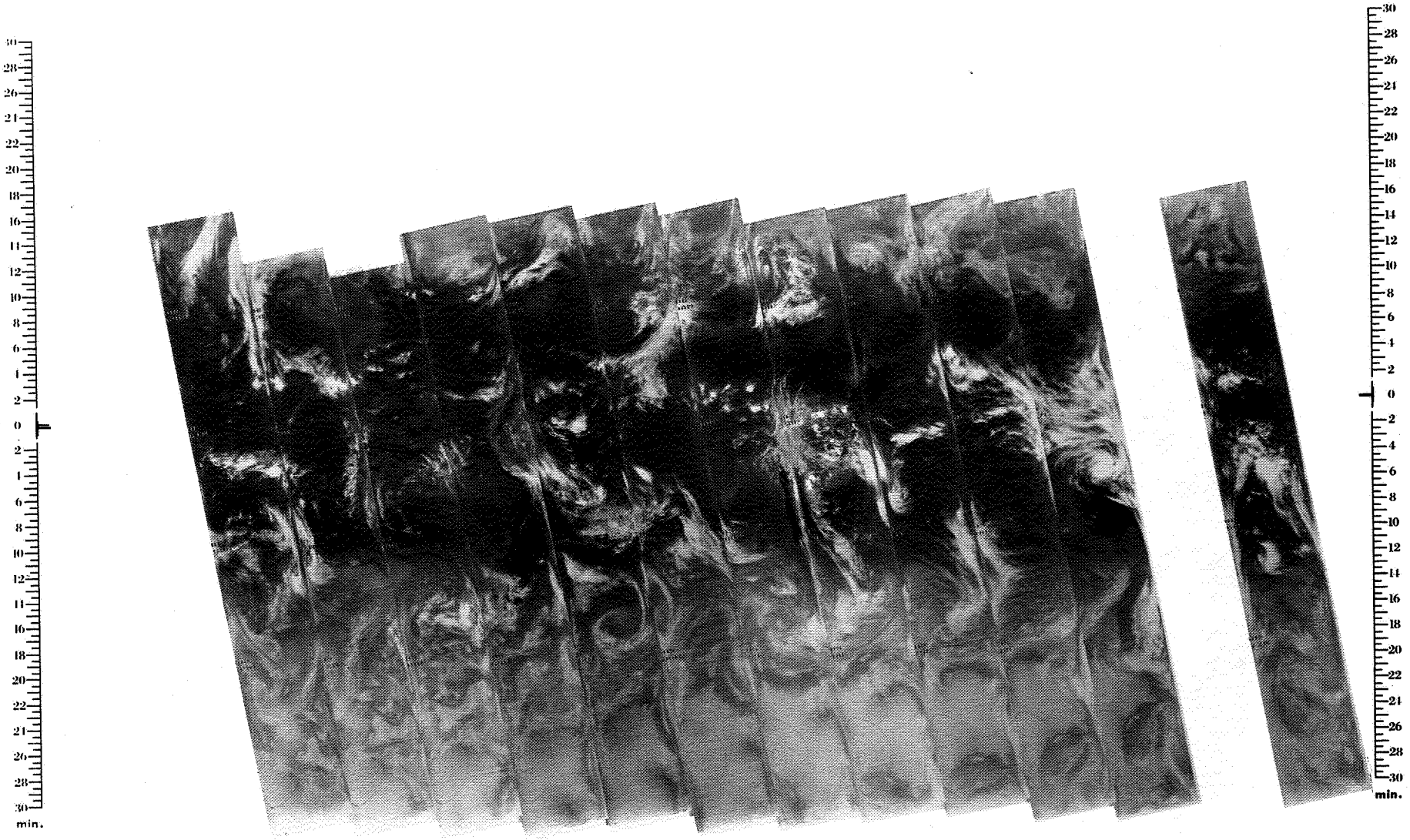


5150 5149 5148 5147 5146 5145 5144 5143 5142 5141 5140 5139 5138

29 DECEMBER 1973

11.5 μm

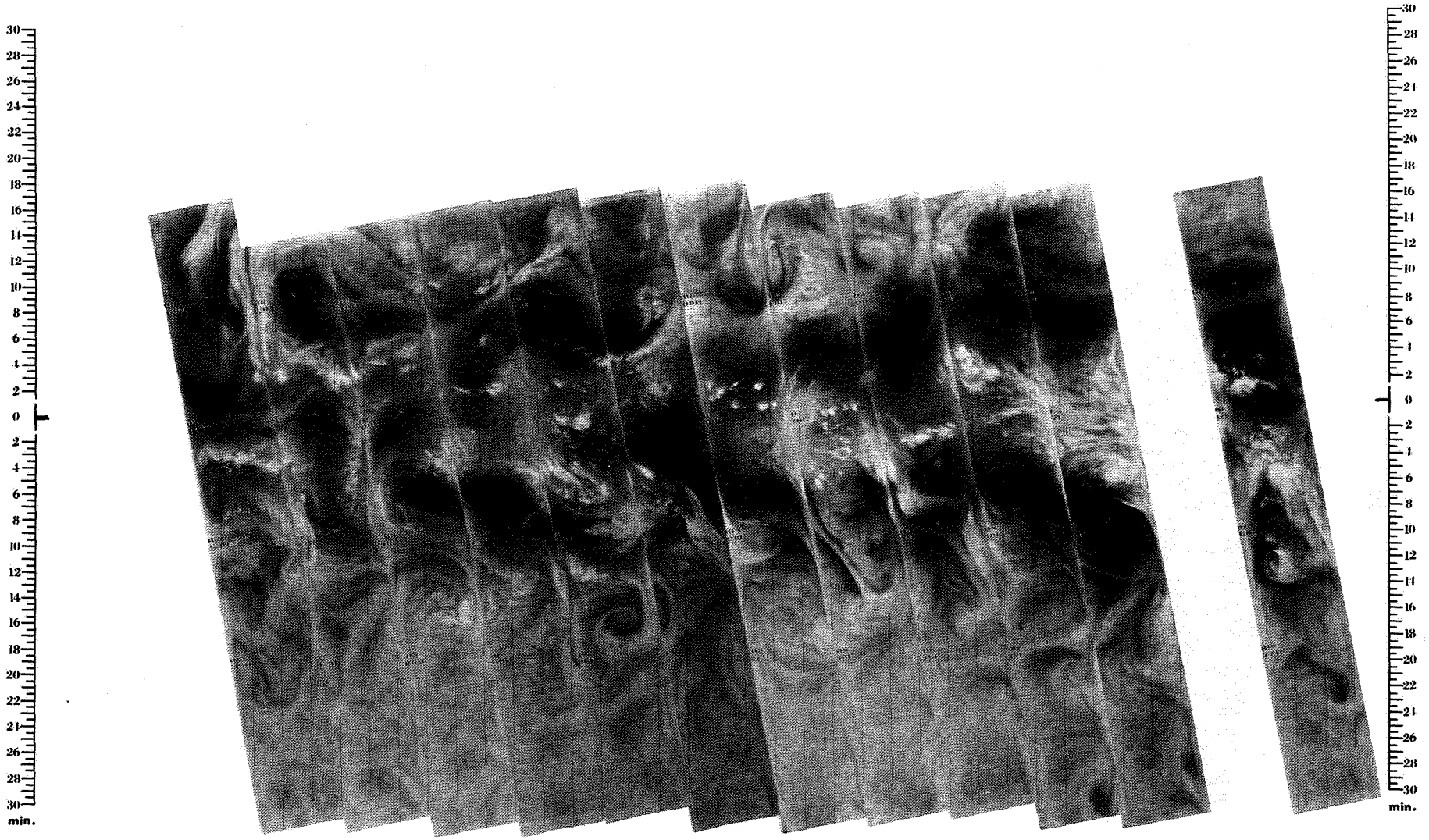
5138
5139
5140
5141
5142
5143
5144
5145
5146
5147
5148
5149
5150
29 DECEMBER 1973
11.5 μm
min.

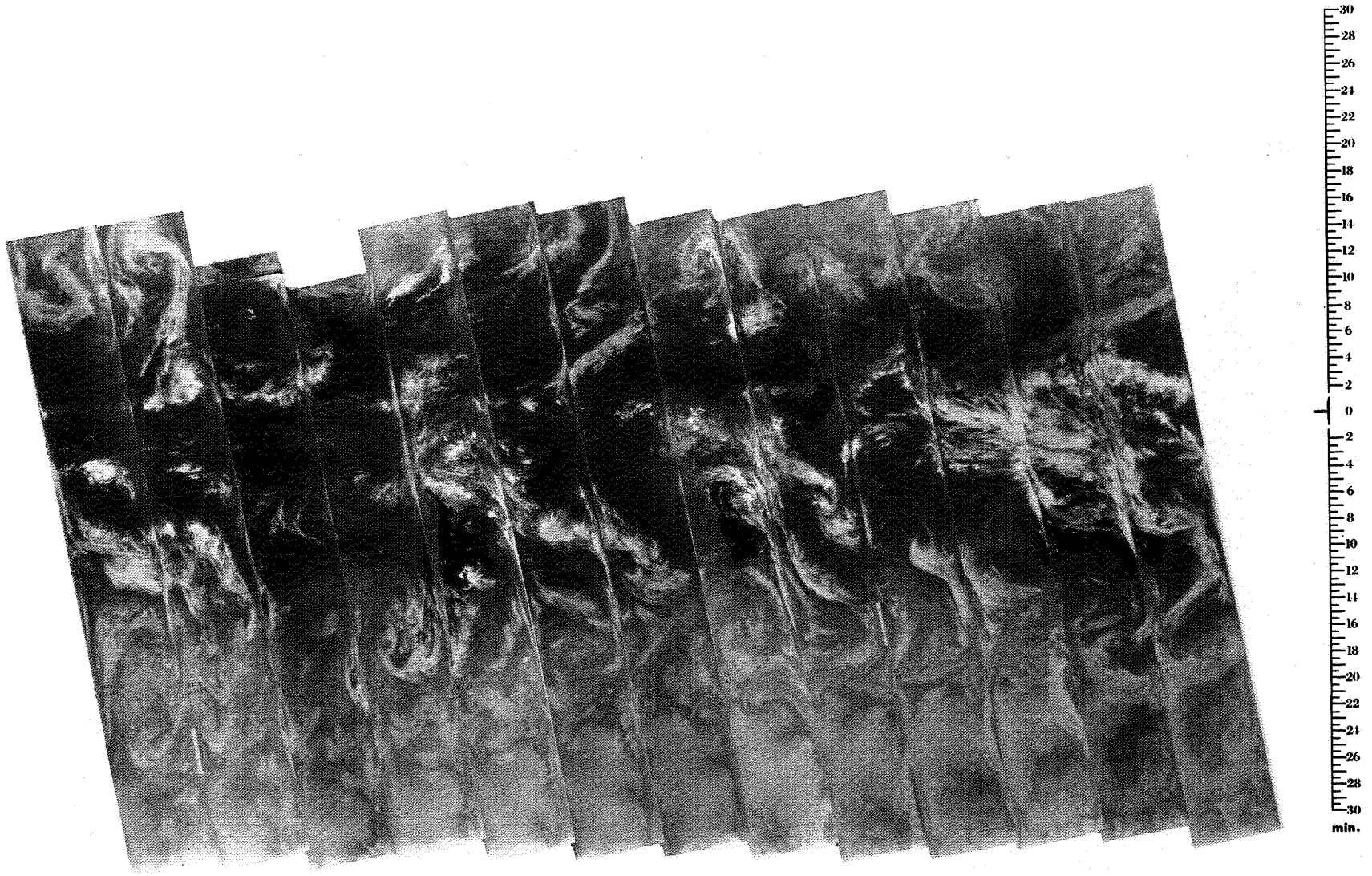


5163 5162 5161 5160 5159 5158 5157 5156 5155 5154 5153 5152 5151

30 DECEMBER 1973

11.5 μm

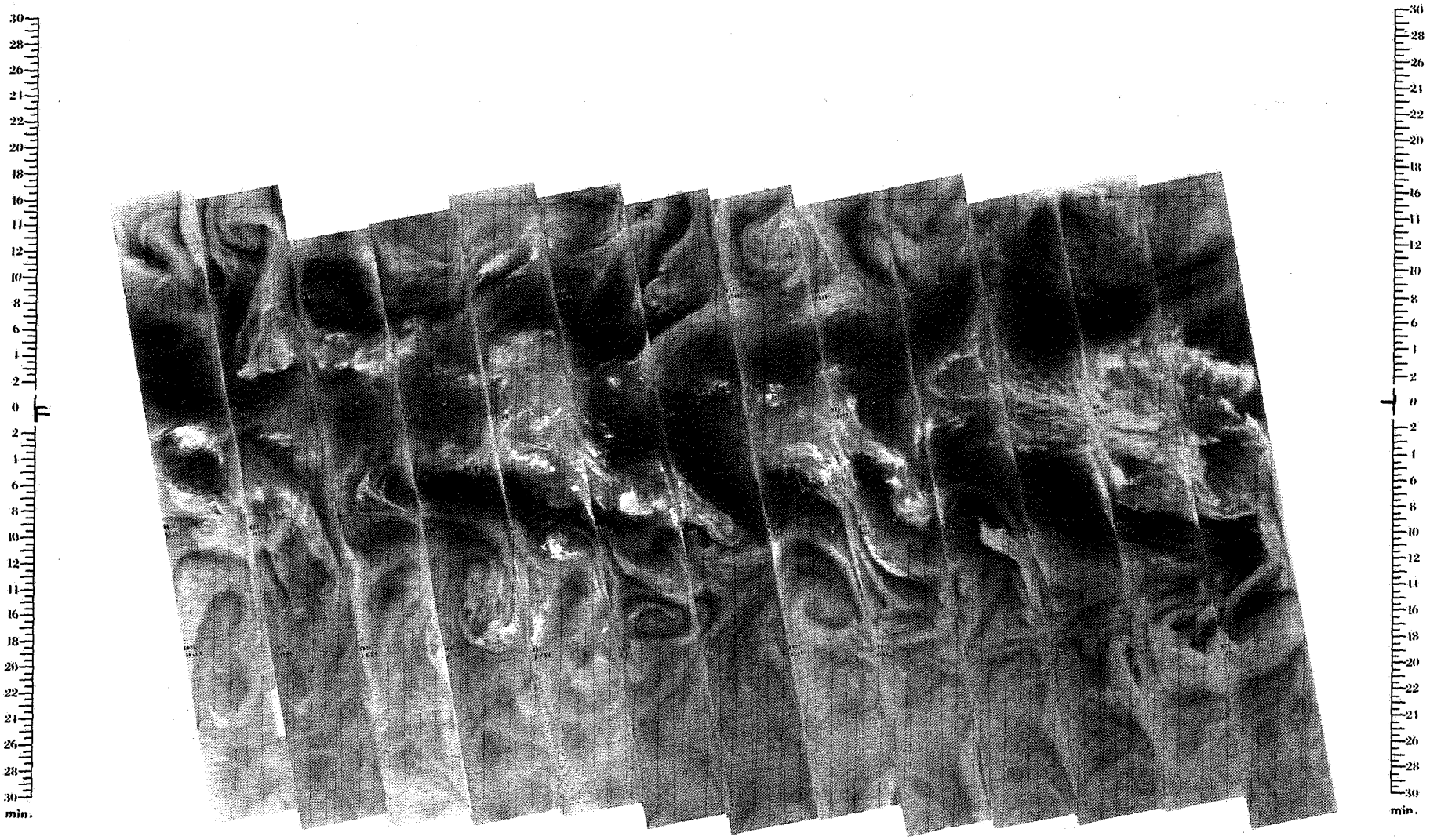

min.
min.
5163 5162 5161 5160 5159 5158 5157 5156 5155 5154 5153 5152 5151
30 DECEMBER 1973
6.7 μm



5177 5176 5175 5174 5173 5172 5171 5170 5169 5168 5167 5166 5165 5164

31 DECEMBER 1973

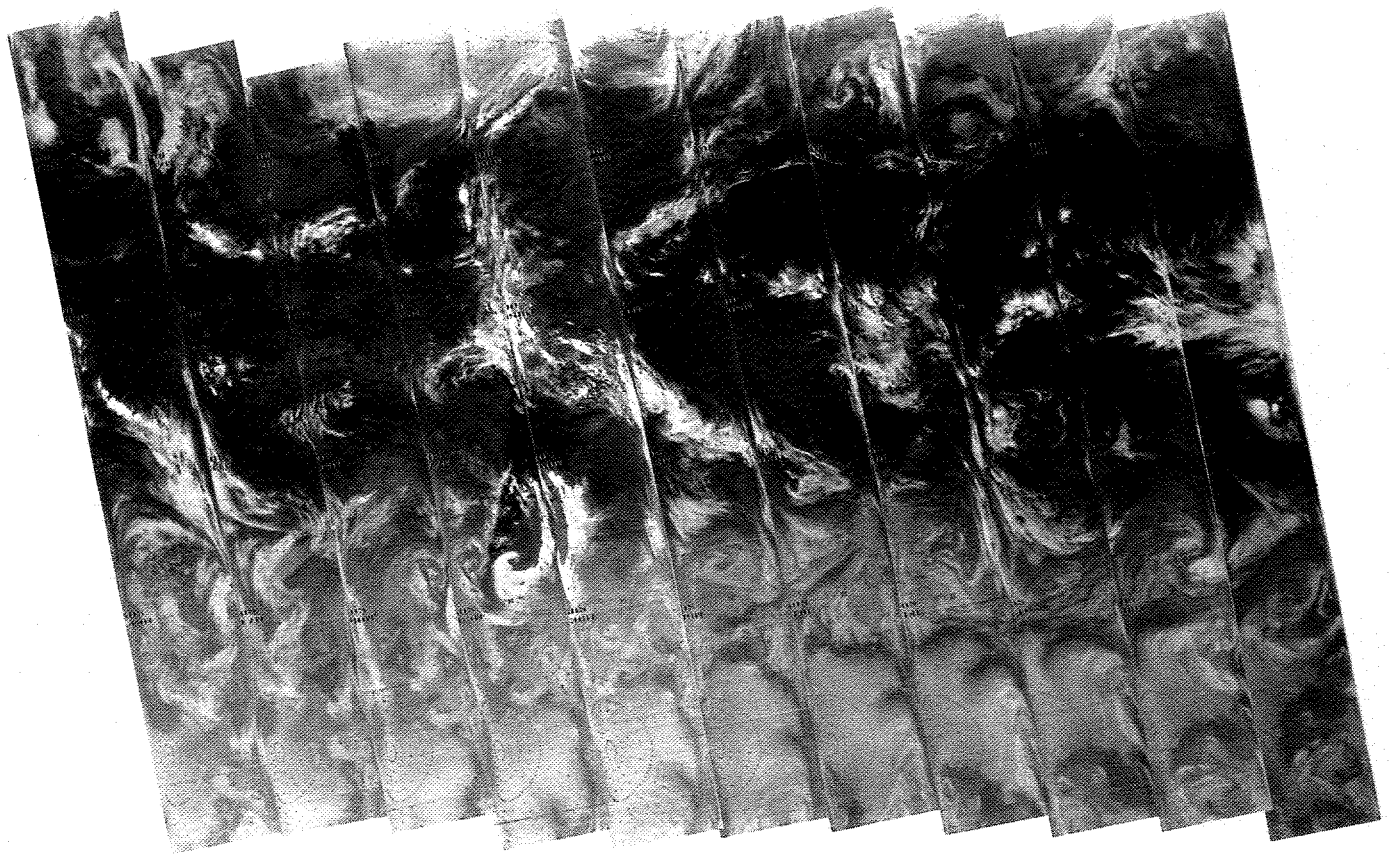
11.5 μm



5177 5176 5175 5174 5173 5172 5171 5170 5169 5168 5167 5166 5165 5164

31 DECEMBER 1973

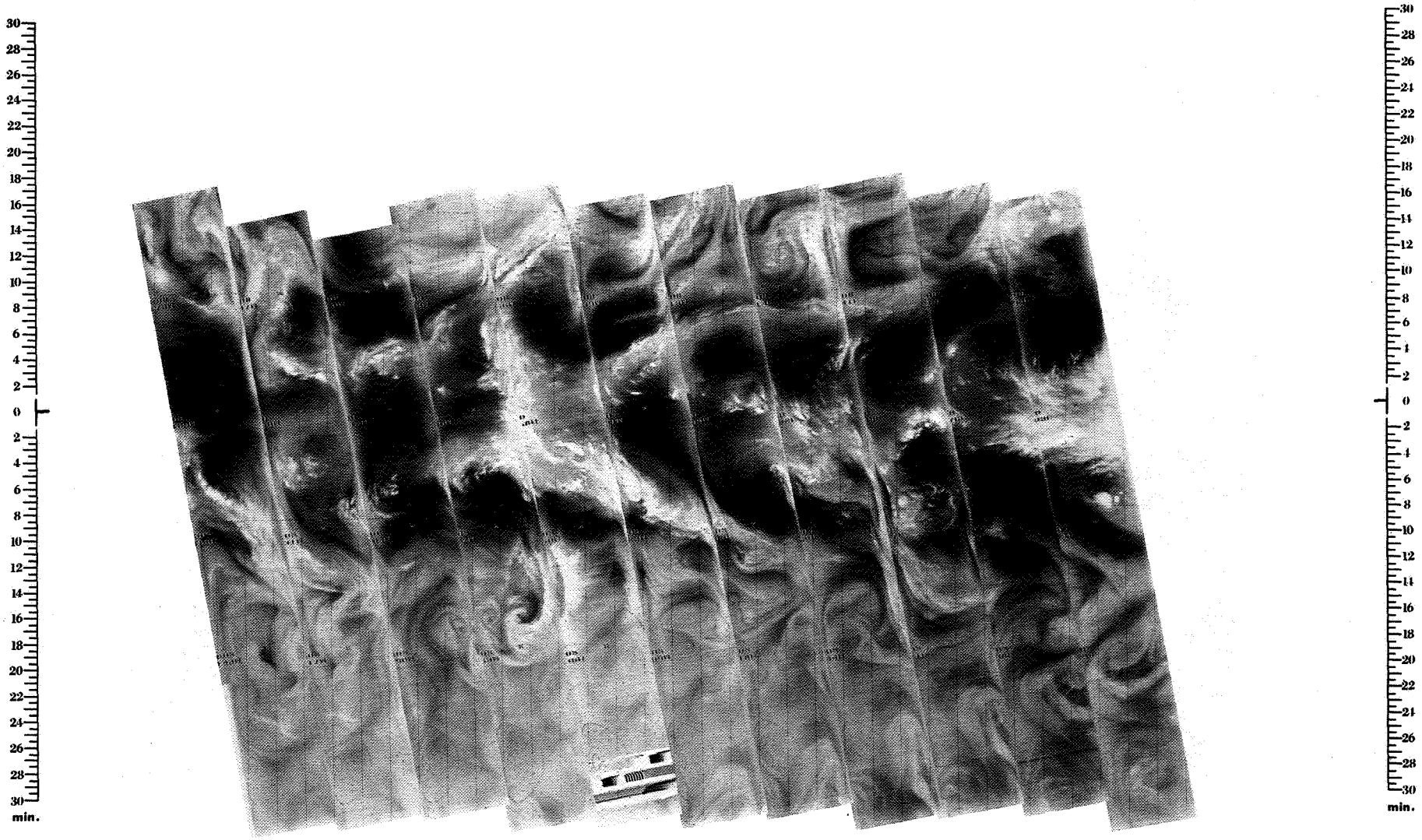
6.7 μm



5190 5189 5188 5187 5186 5185 5184 5183 5182 5181 5180 5179 5178

1 JANUARY 1974

11.5 μm



5190 5189 5188 5187 5186 5185 5184 5183 5182 5181 5180 5179 5178

1 JANUARY 1974

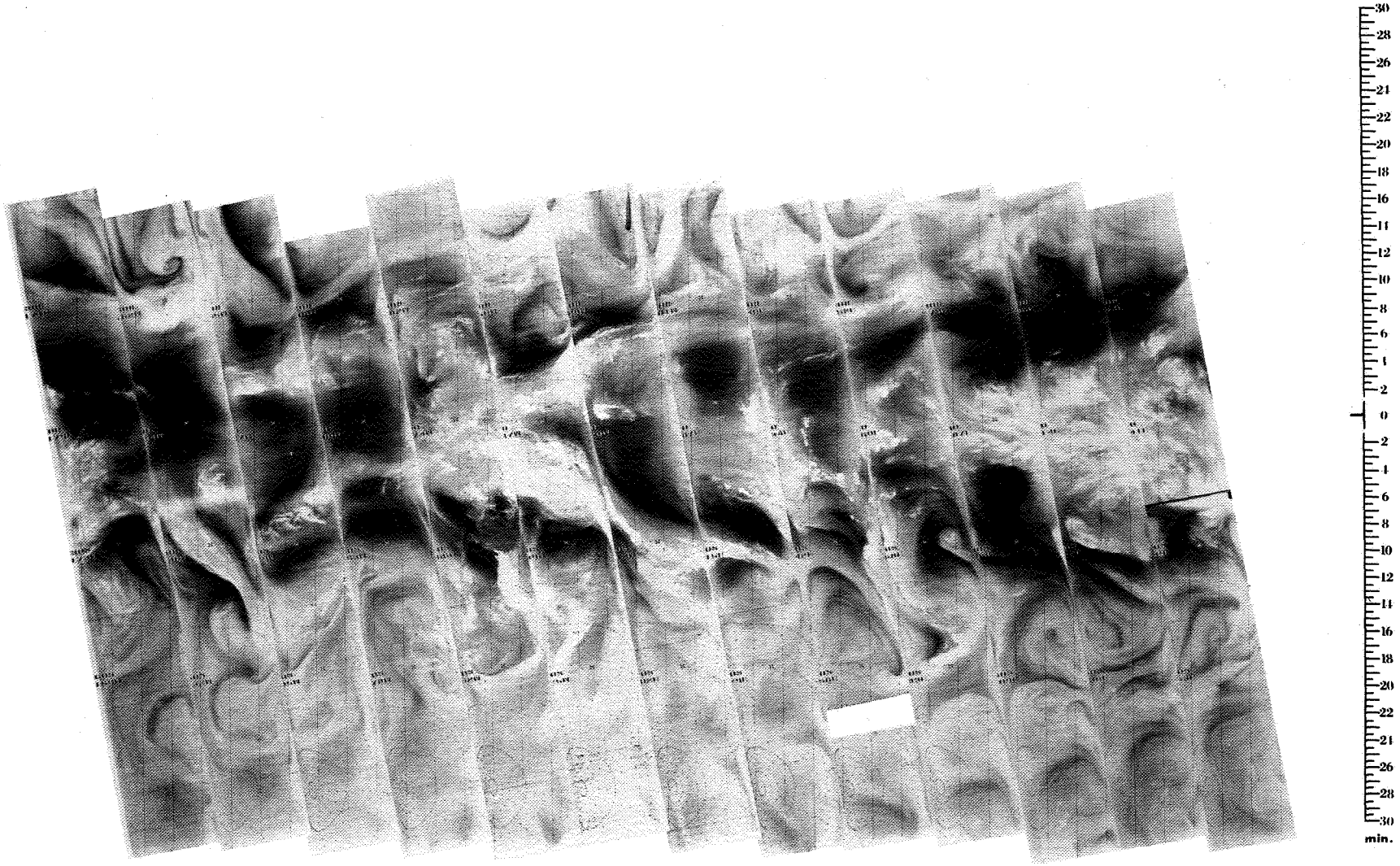
6.7 μm



5204 5203 5202 5201 5200 5199 5189 5197 5196 5195 5194 5193 5192 5191

2 JANUARY 1974

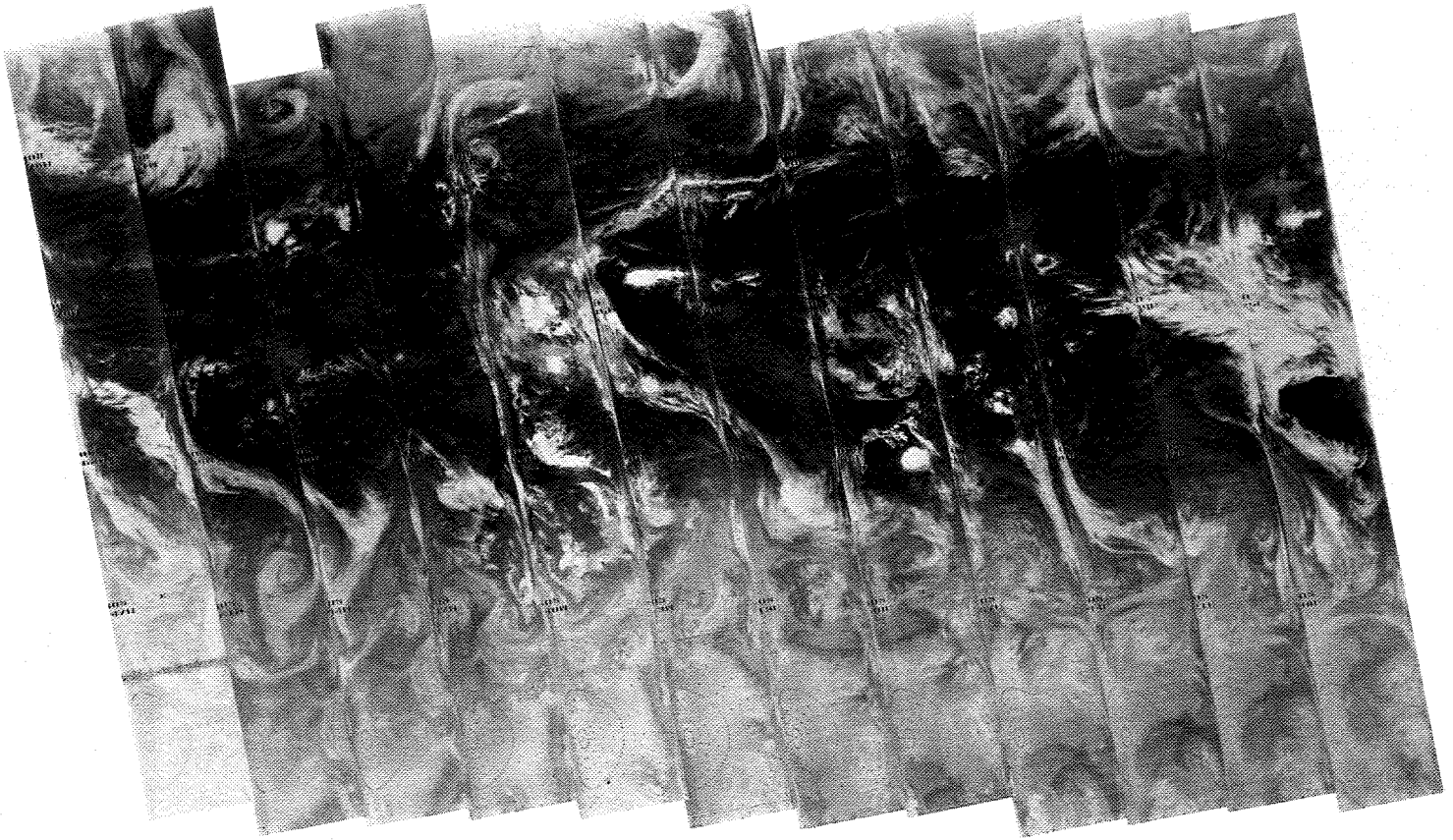
11.5 μm



5204 5203 5202 5201 5200 5199 5198 5197 5196 5195 5194 5193 5192 5191

2 JANUARY 1974

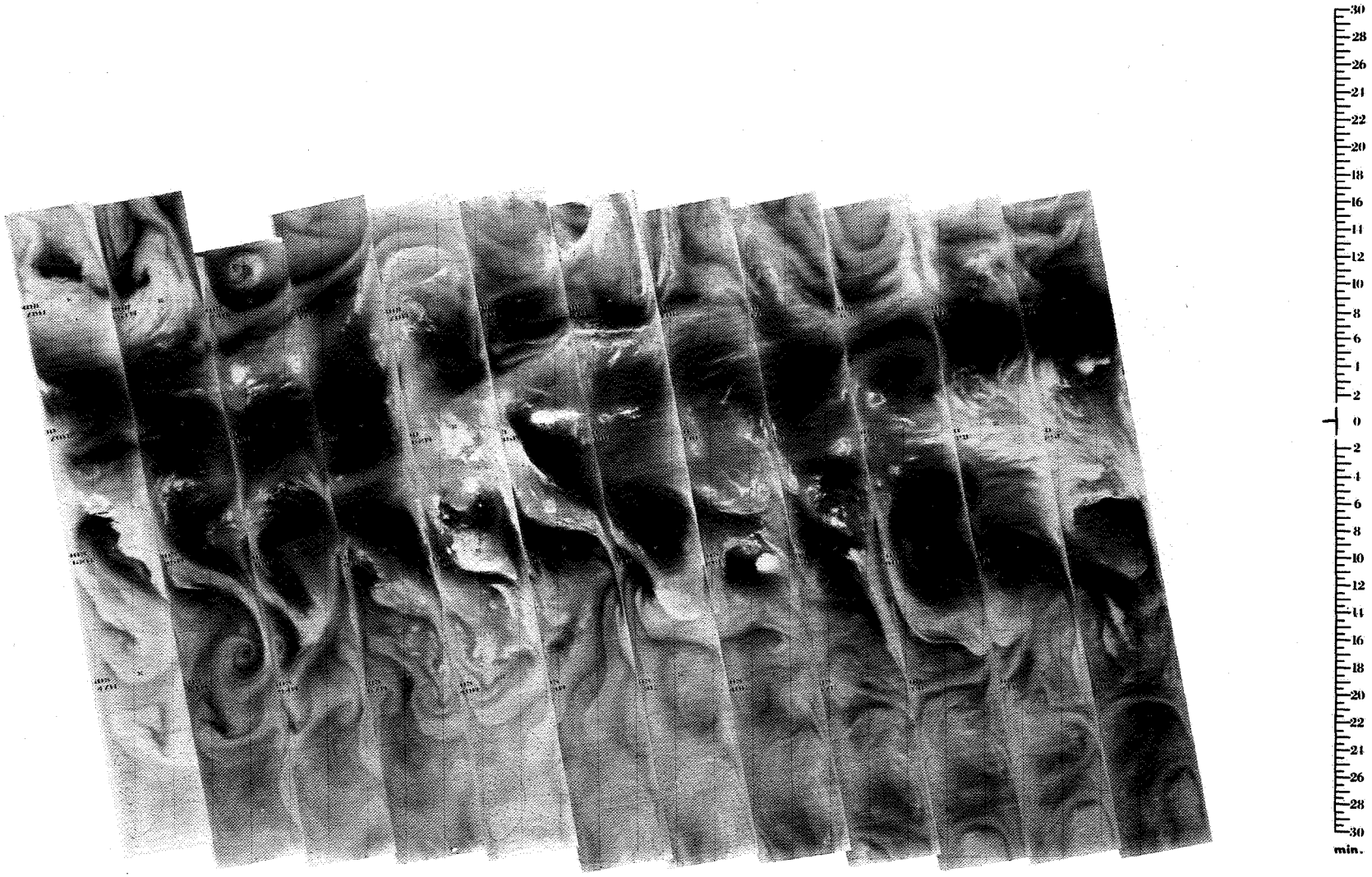
6.7 μm



5217 5216 5215 5214 5213 5212 5111 5210 5209 5208 5207 5206 5205

3 JANUARY 1974

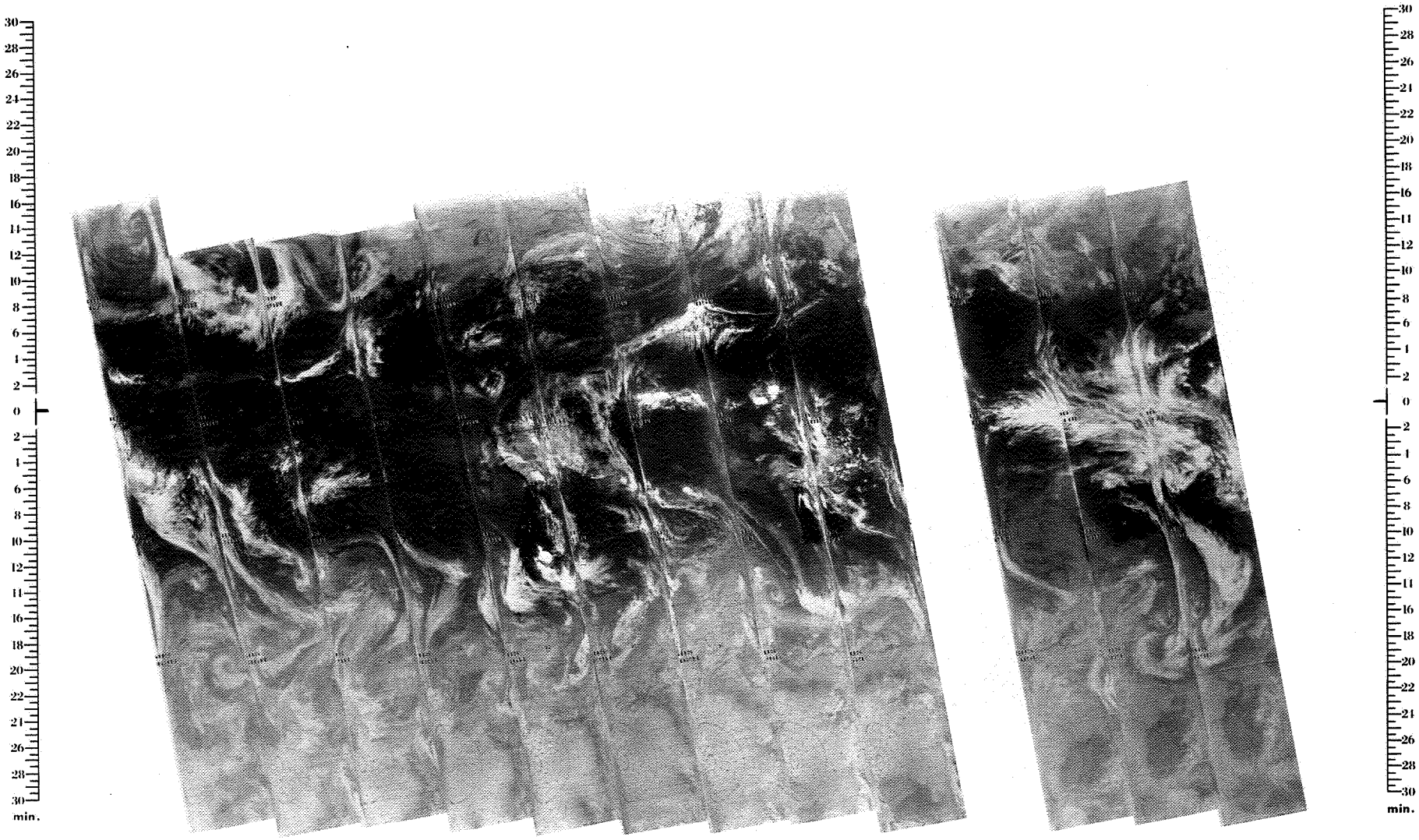
11.5 μm



5217 5216 5215 5214 5213 5212 5211 5210 5209 5208 5207 5206 5205

3 JANUARY 1974

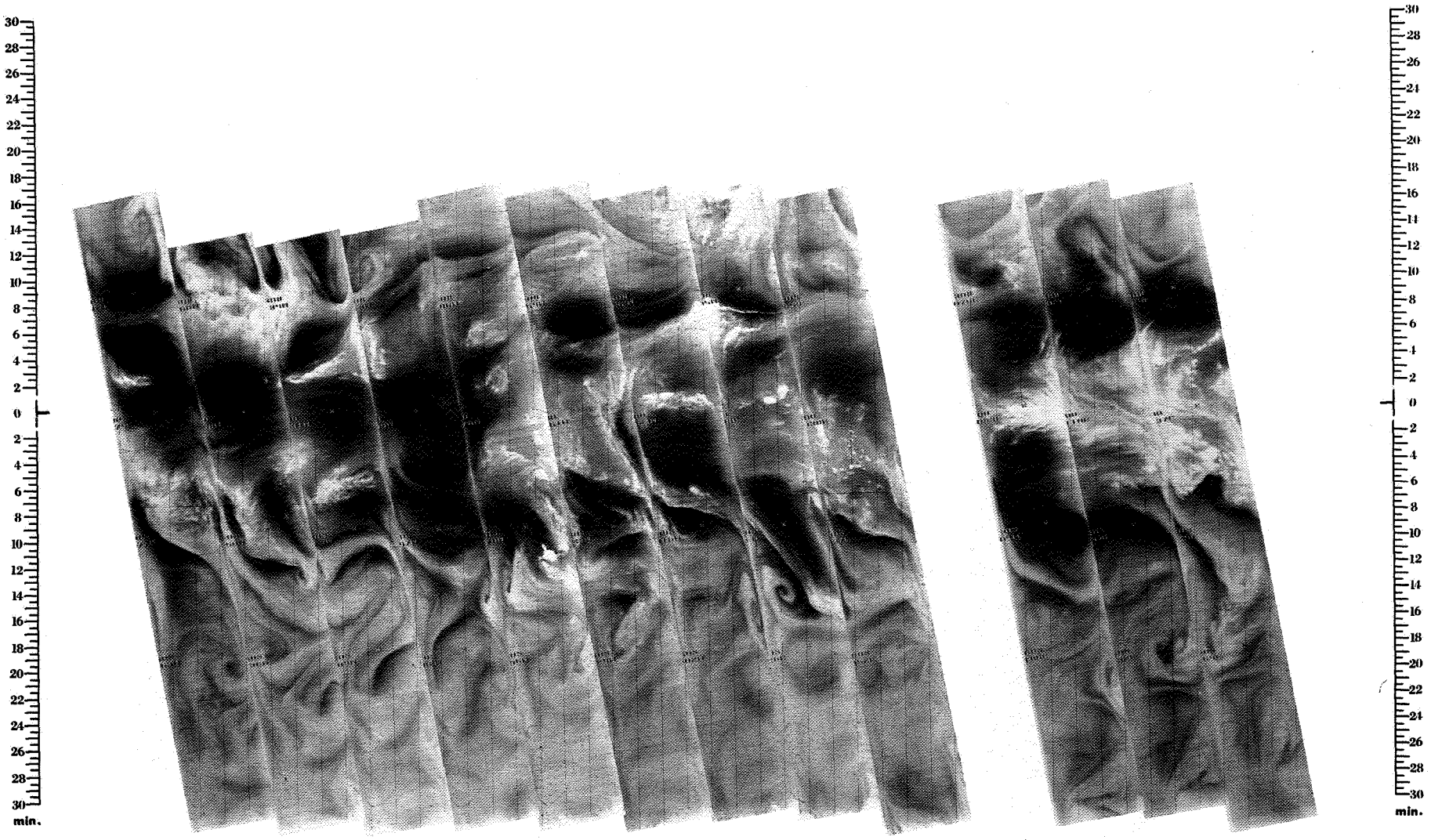
6.7 μm



5231 5230 5229 5228 5227 5226 5225 5224 5223 5222 5221 5220 5219 5218

4 JANUARY 1974

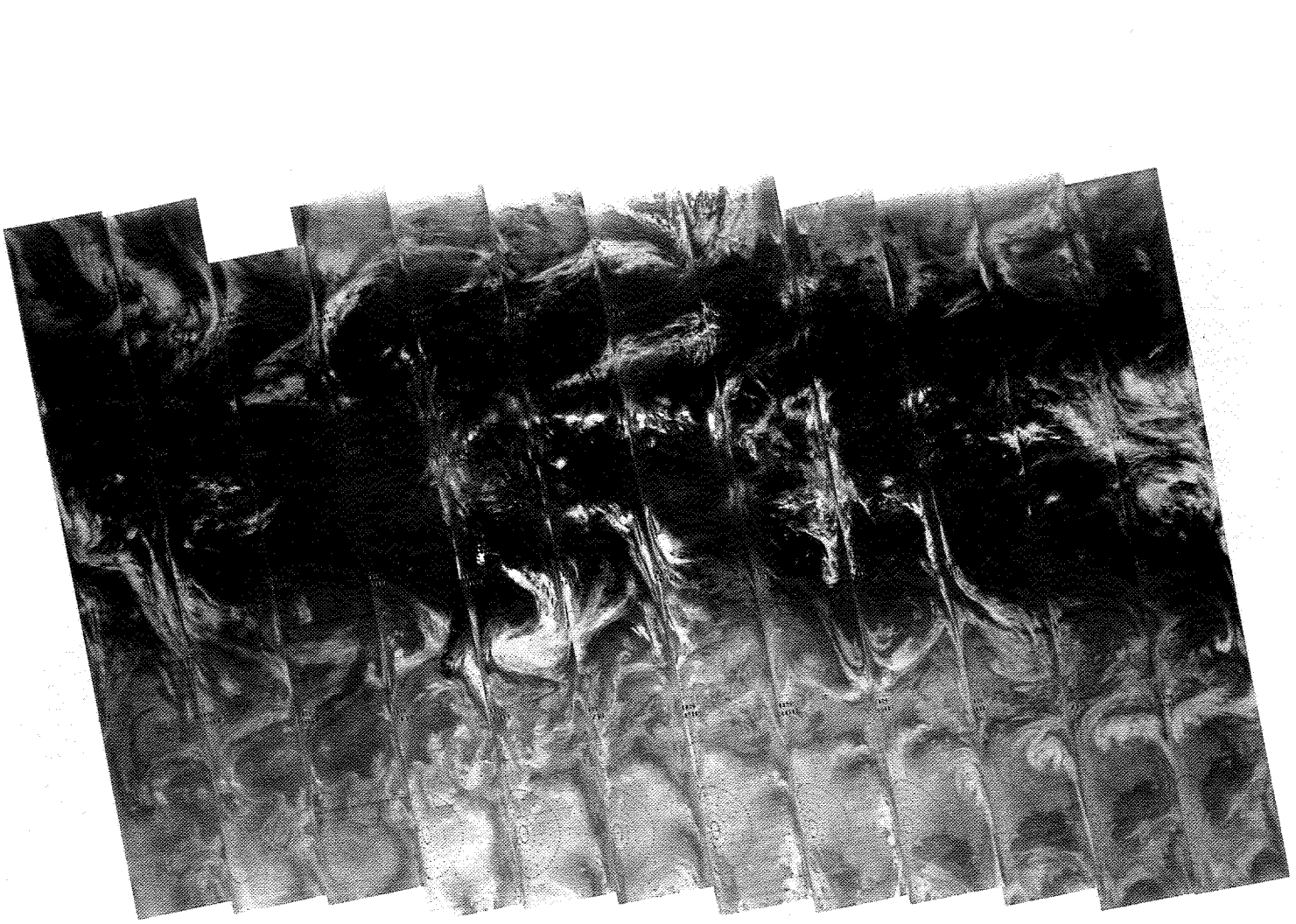
11.5 μm



5231 5230 5229 5228 5227 5226 5225 5224 5223 5222 5221 5220 5219 5218

4 JANUARY 1974

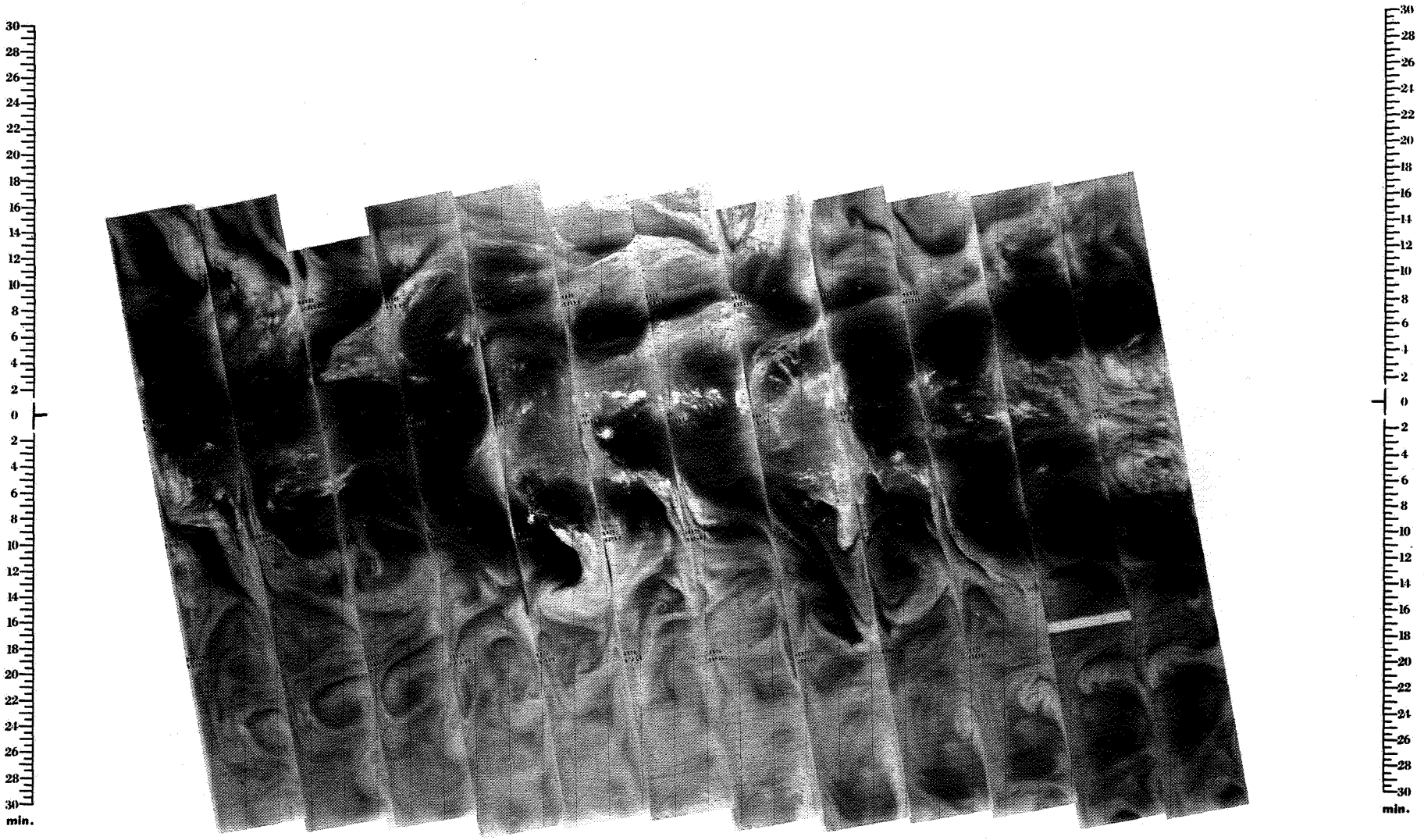
6.7 μm



5244 5243 5242 5241 5240 5239 5238 5237 5236 5235 5234 5233 5232

5 JANUARY 1974

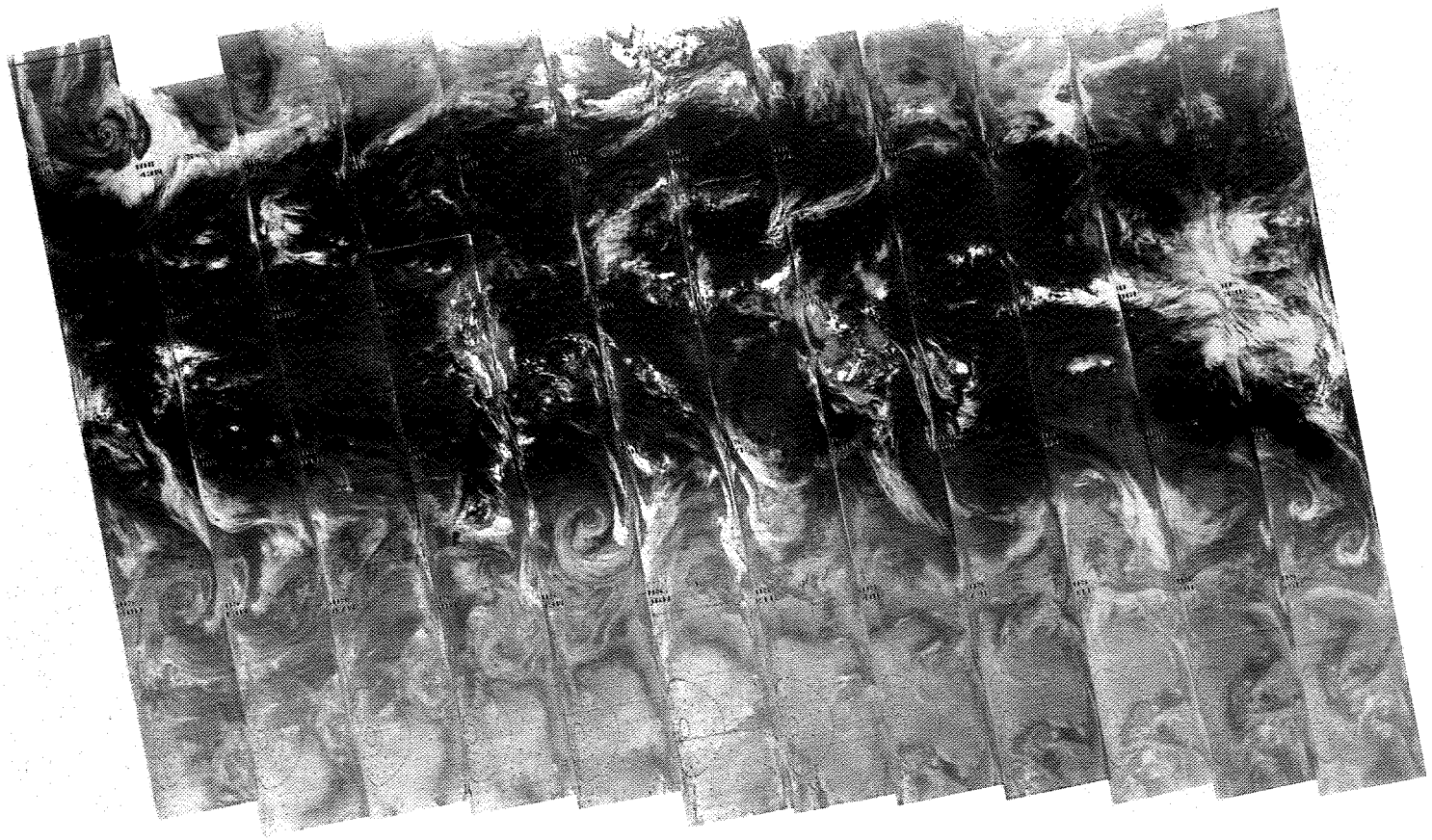
11.5 μm



5244 5243 5242 5241 5240 5239 5238 5237 5236 5235 5234 5233 5232

5 JANUARY 1974

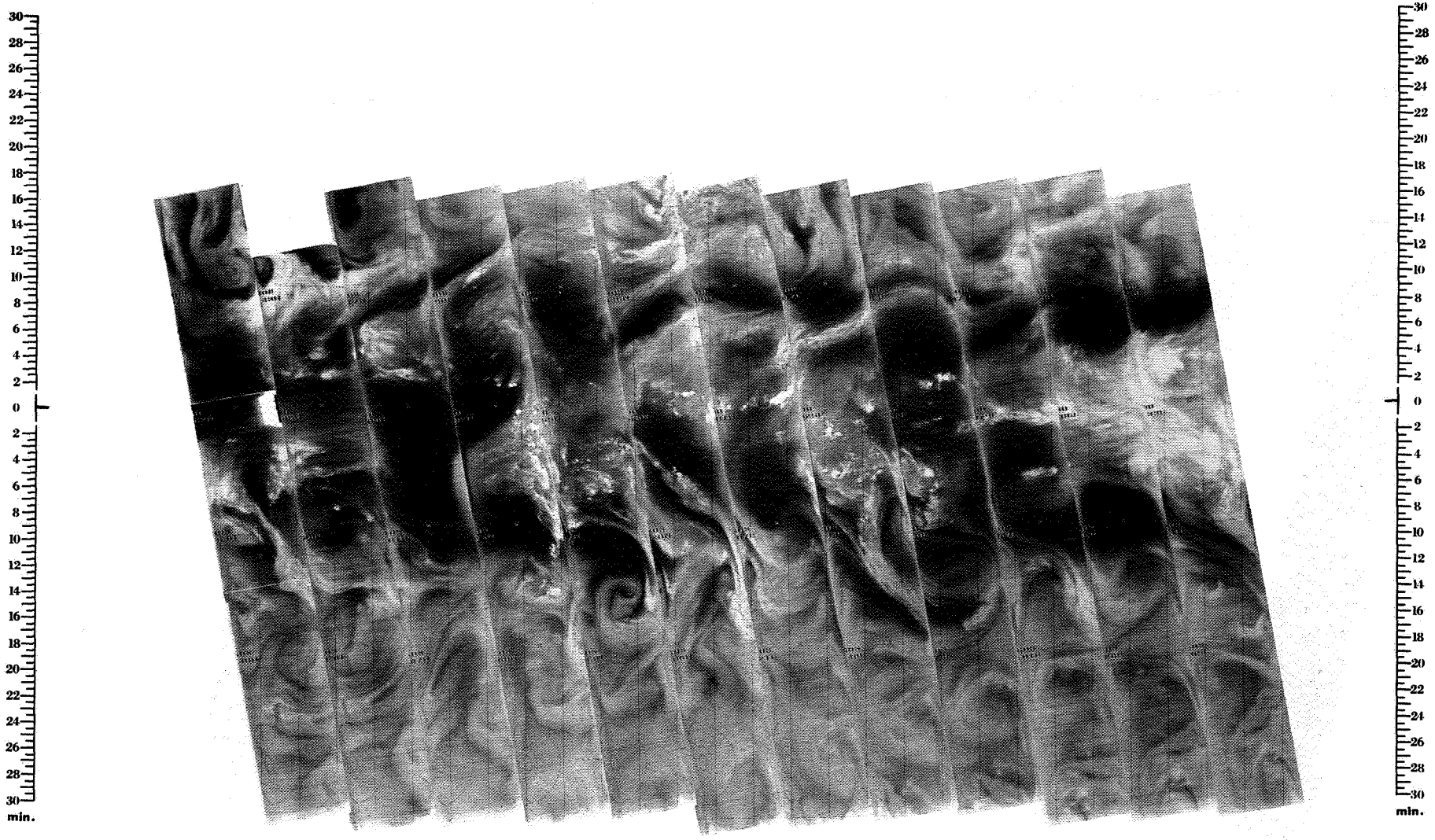
6.7 μm



5257 5256 5255 5254 5253 5252 5251 5250 5249 5248 5247 5246 5245

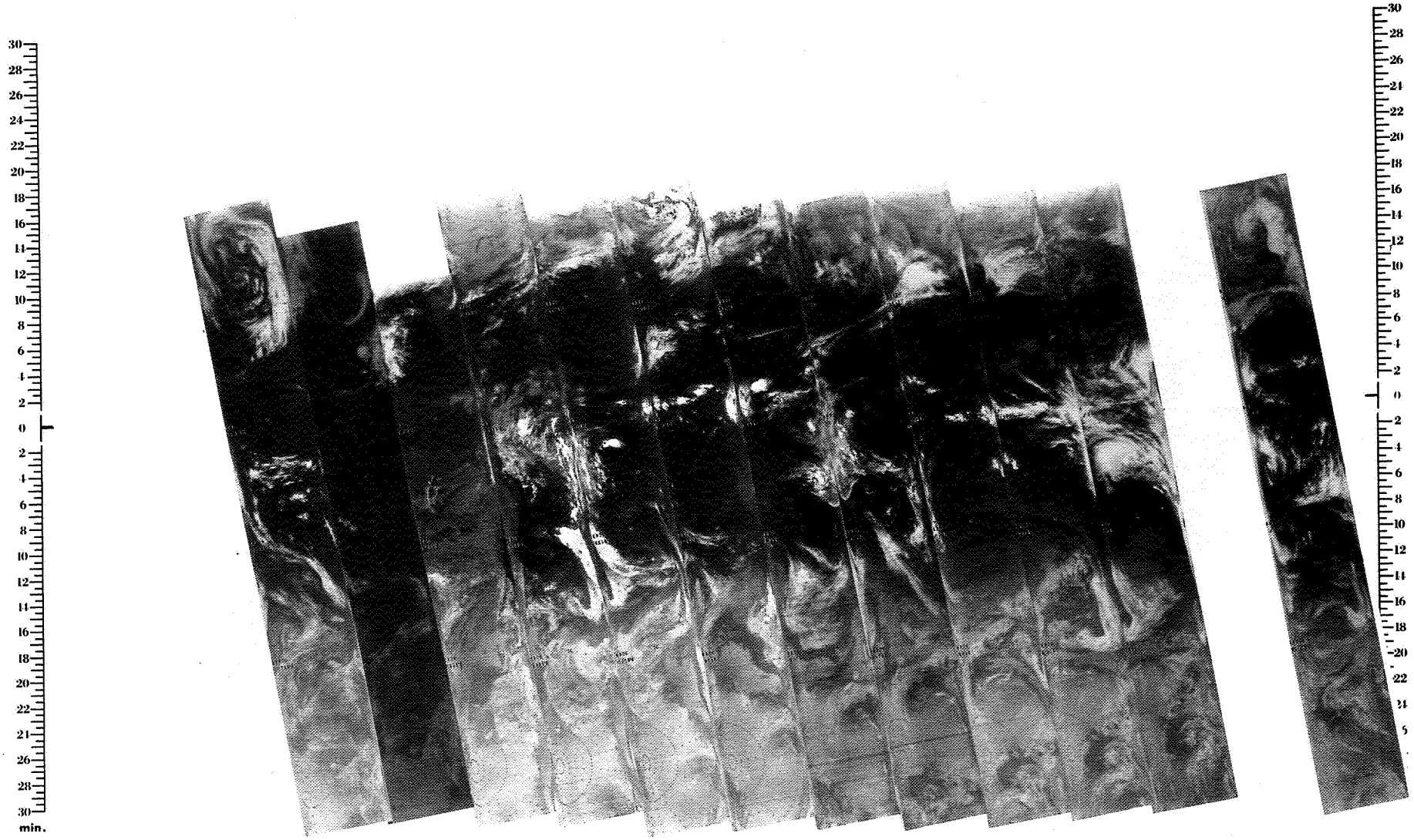
6 JANUARY 1974

11.5 μm



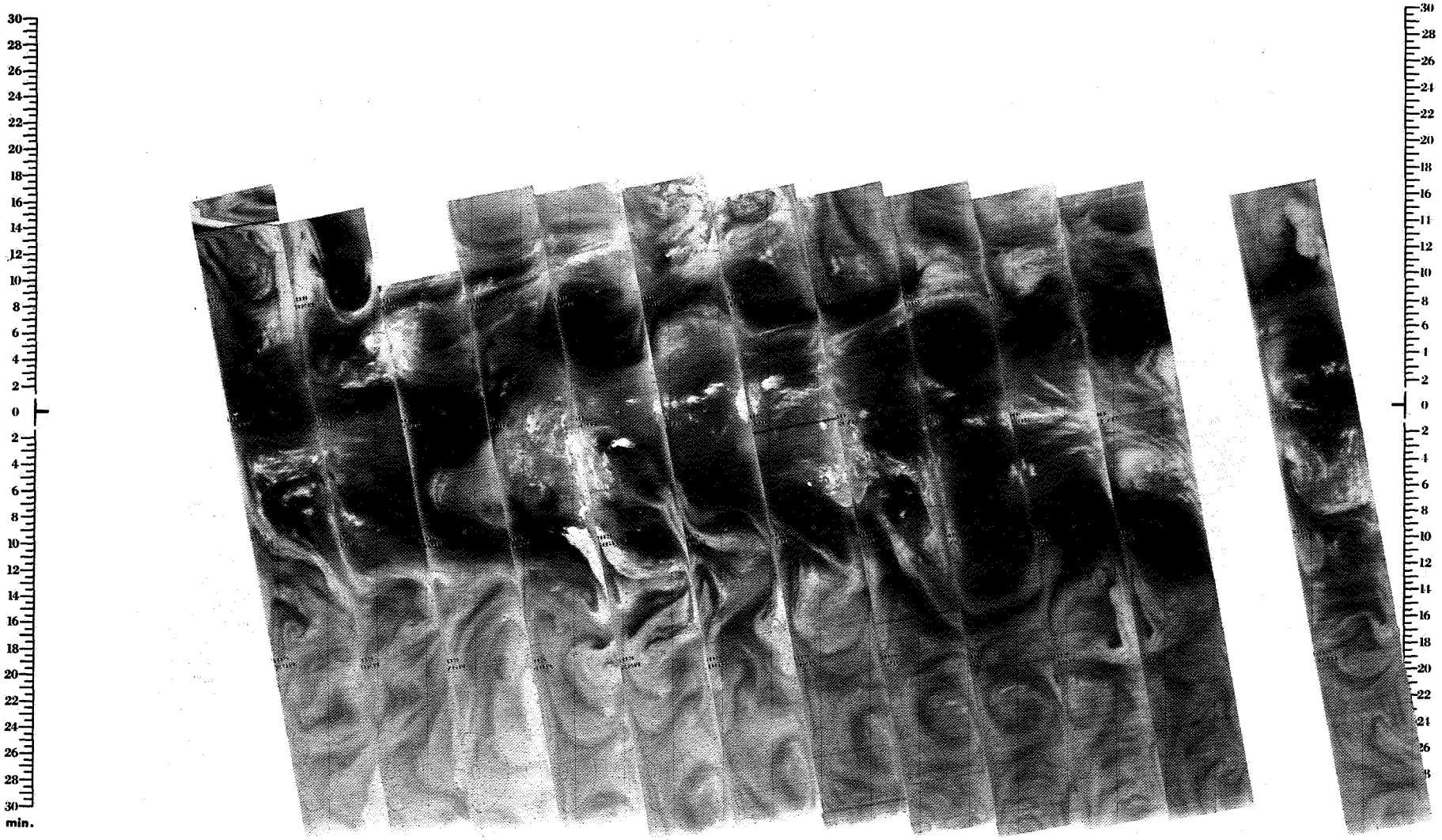
6 JANUARY 1974

6.7 μm



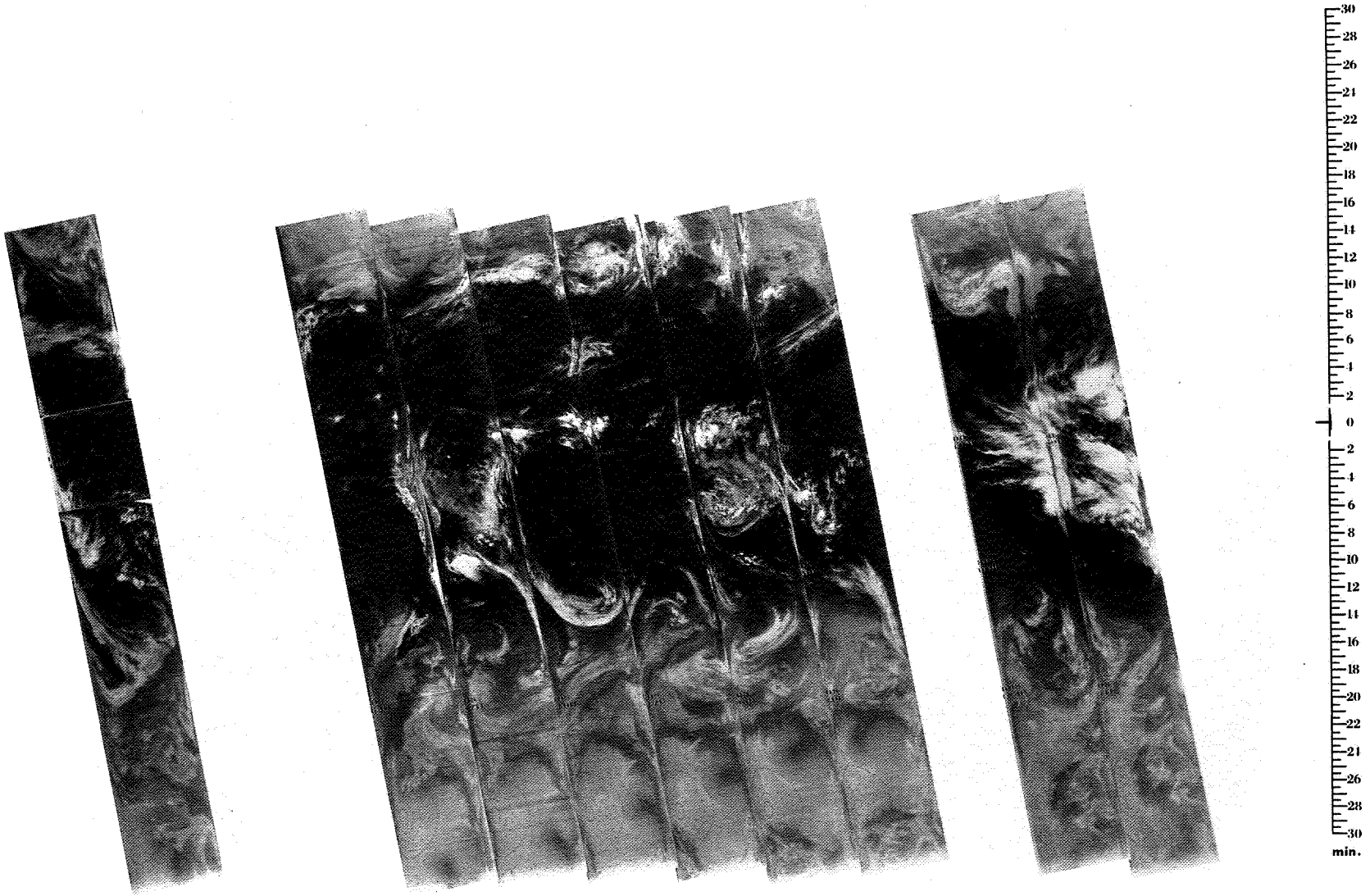
7 JANUARY 1974

11.5 μm



7 JANUARY 1974

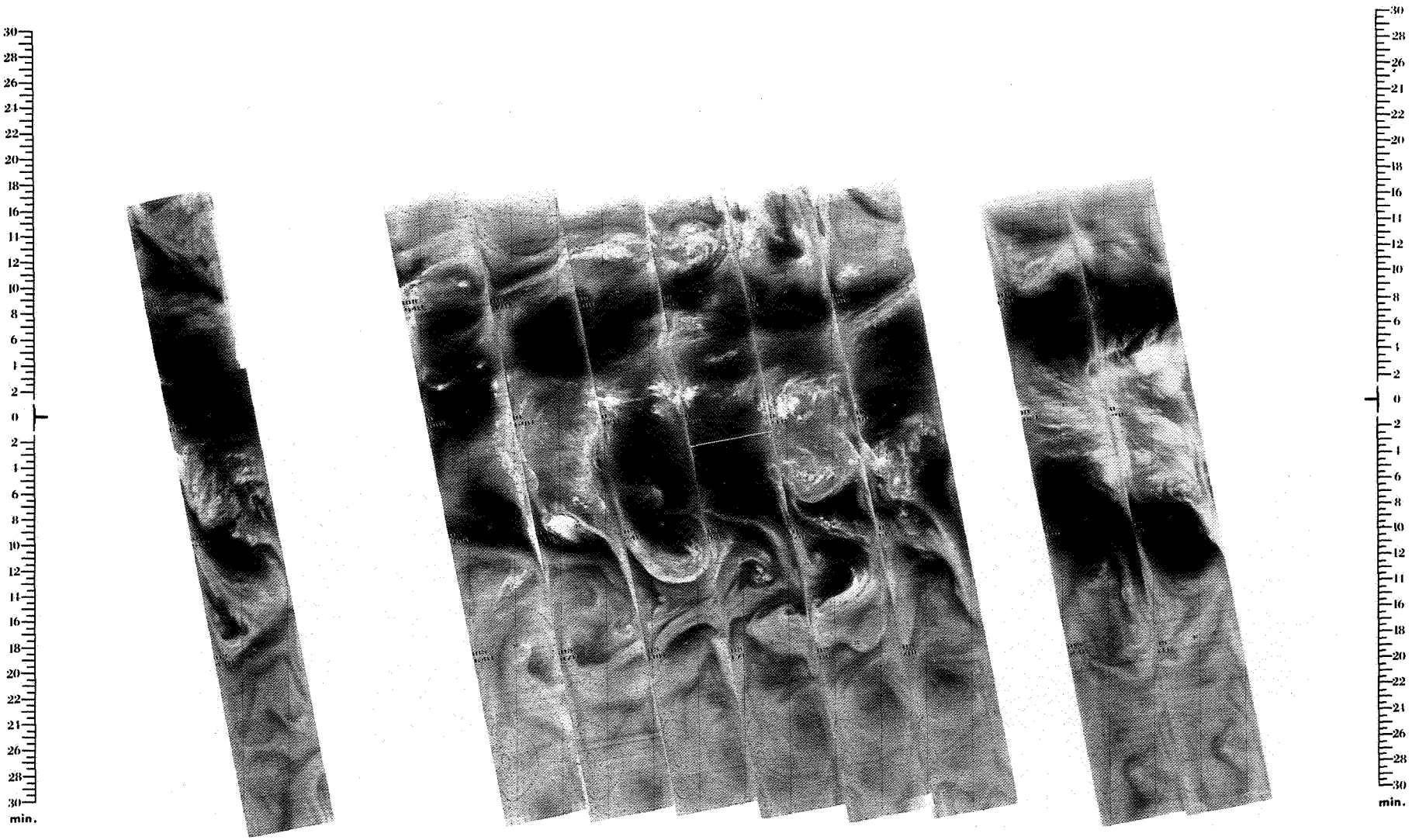
6.7 μm



5284 5283 5282 5281 5280 5279 5278 5277 5276 5275 5274 5273 5272

8 JANUARY 1974

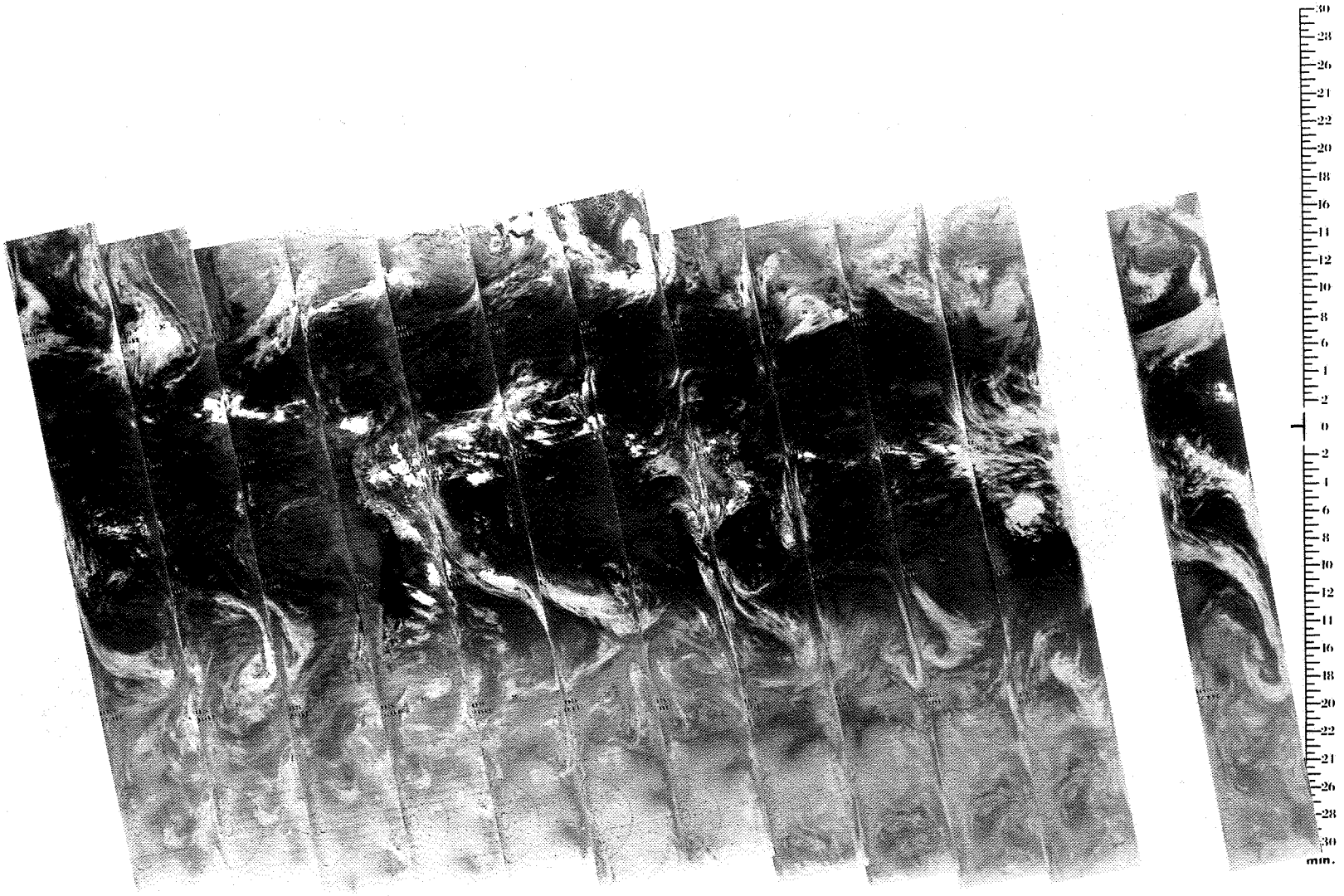
11.5 μm



5284 5283 5282 5281 5280 5279 5278 5277 5276 5275 5274 5273 5272

8 JANUARY 1974

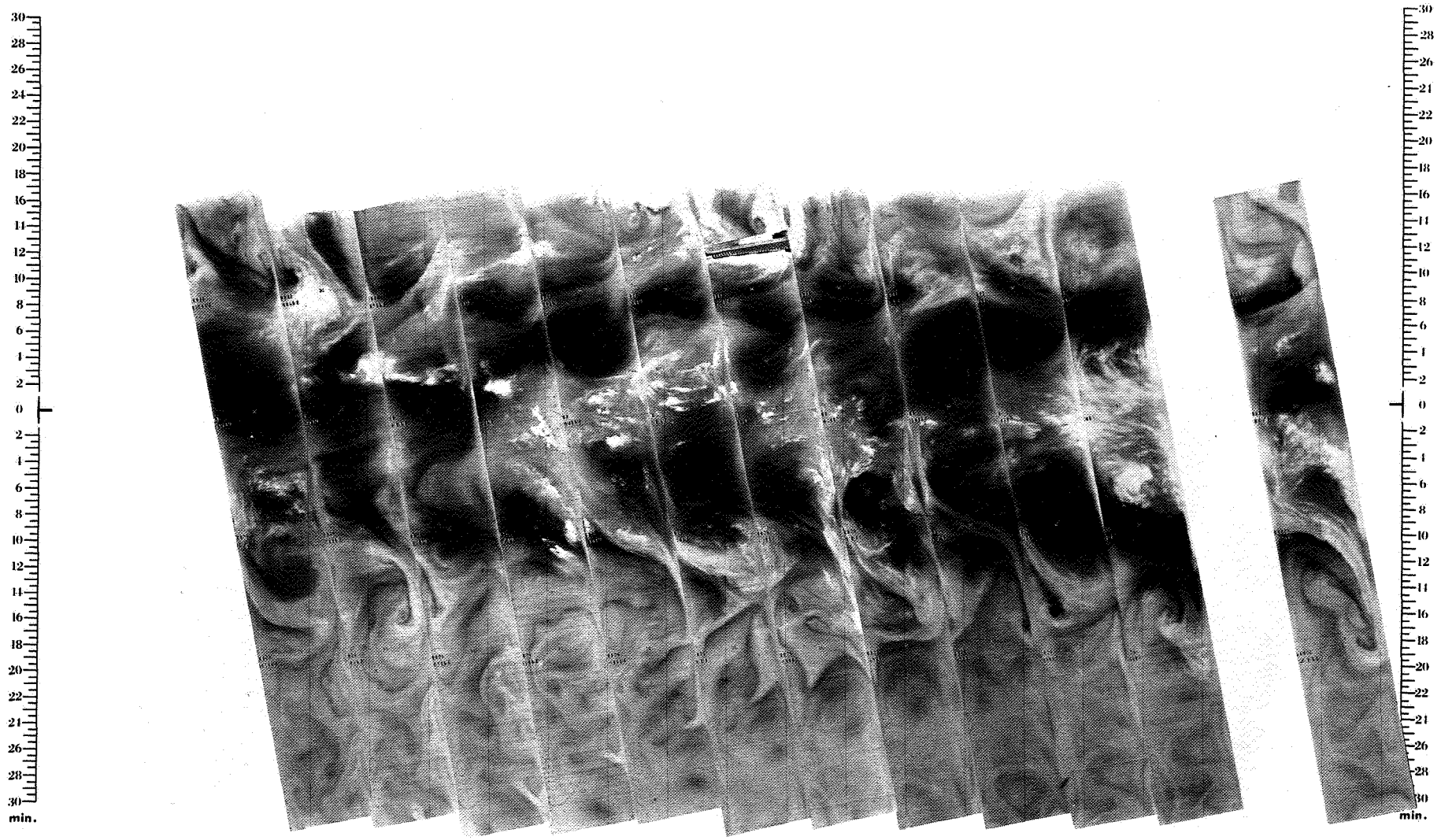
6.7 μm



5298 5297 5296 5295 5294 5293 5292 5291 5290 5289 5288 5287 5286 5285

9 JANUARY 1974

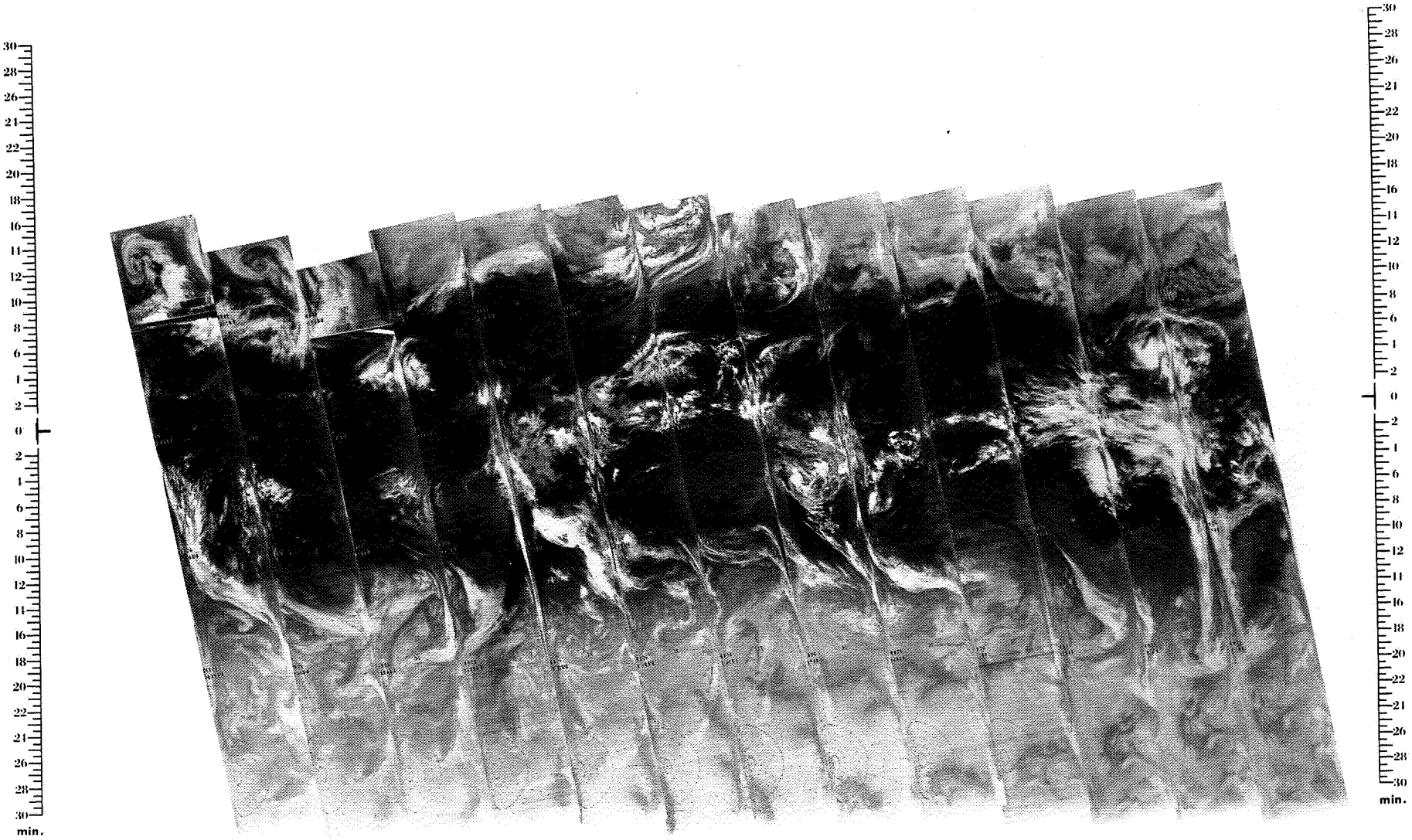
11.5 μm



5298 5297 5296 5295 5294 5293 5292 5291 5290 5289 5288 5287 5286 5285

9 JANUARY 1974

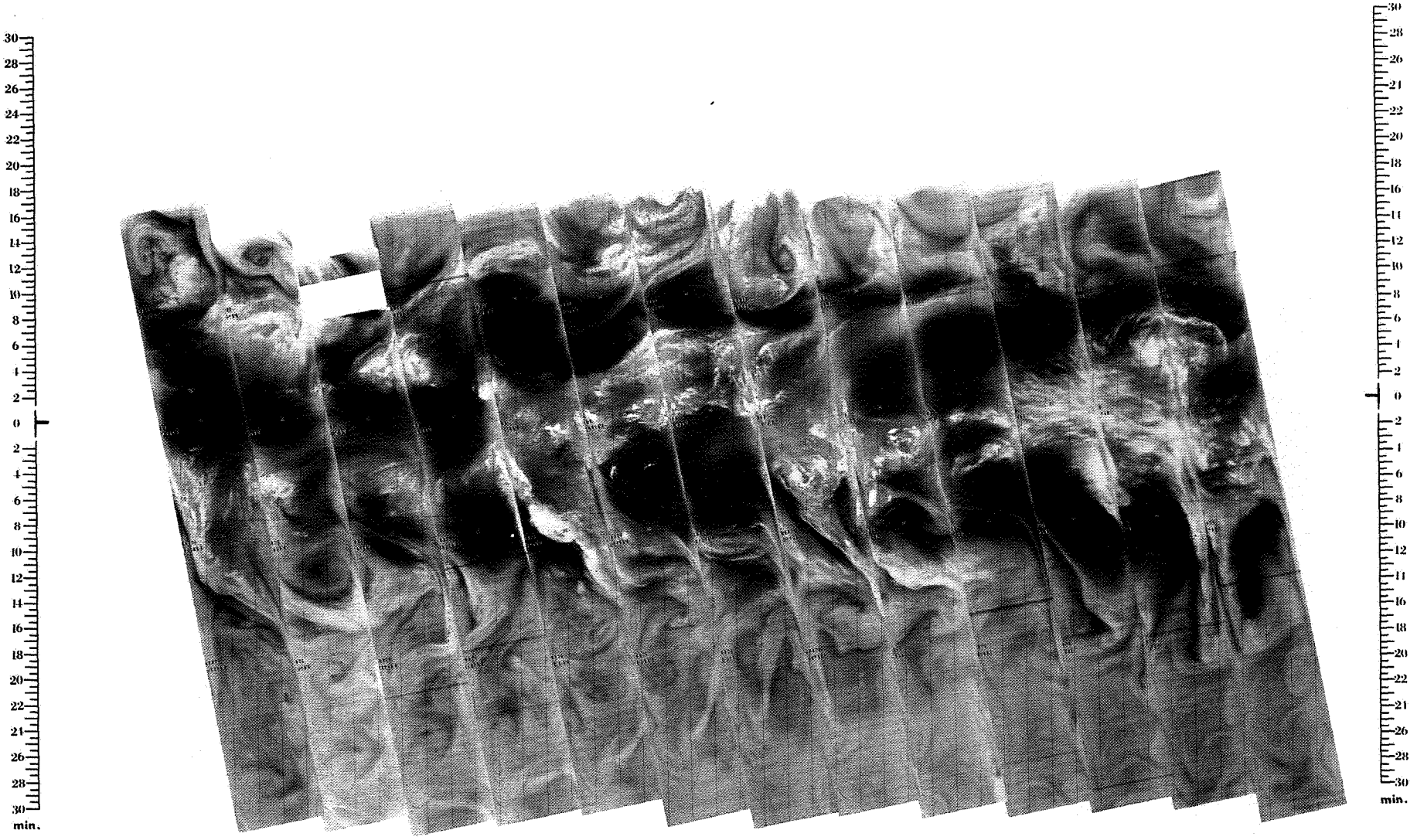
6.7 μm



5311 5310 5309 5308 5307 5306 5305 5304 5303 5302 5301 5300 5299

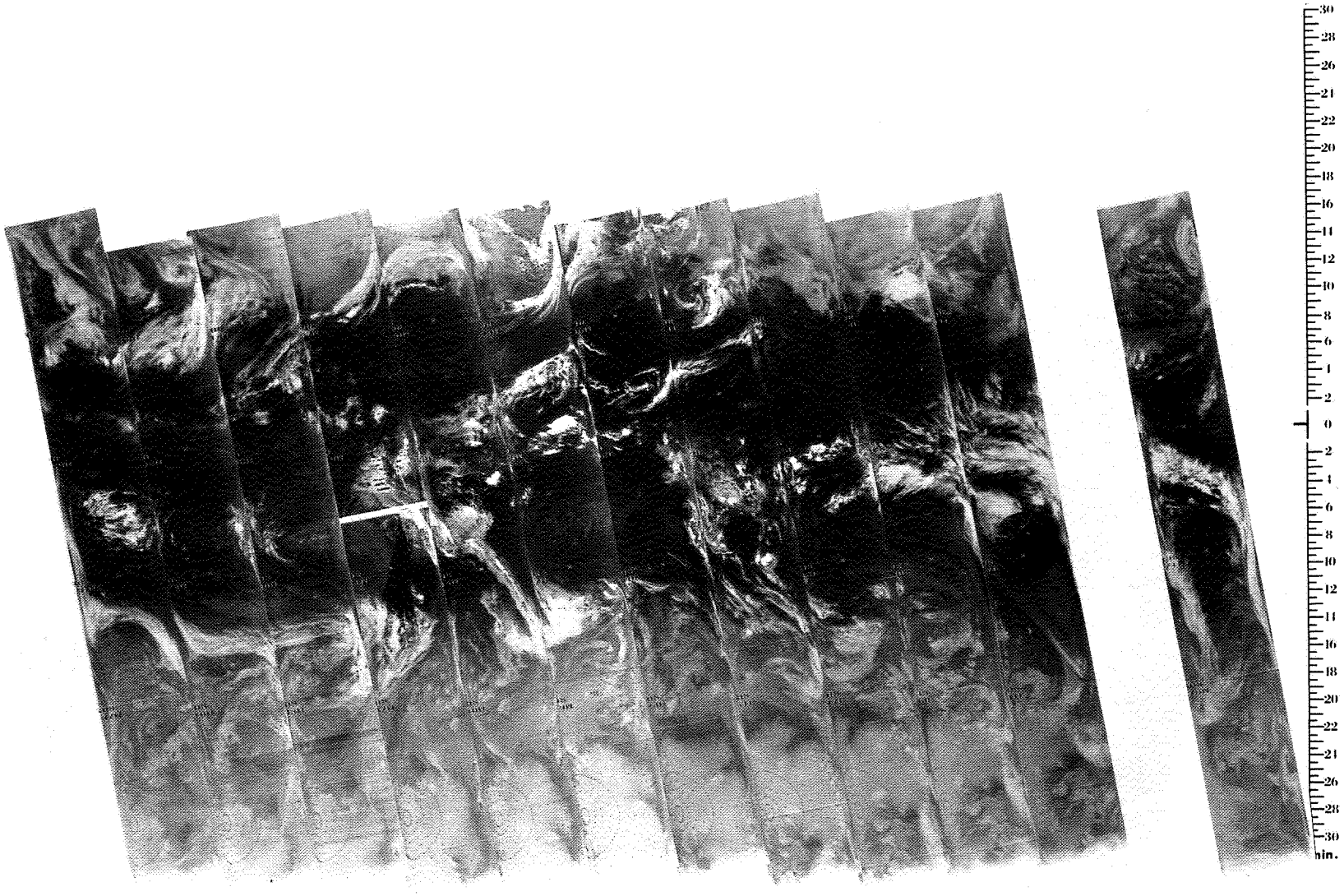
10 JANUARY 1974

11.5 μm



10 JANUARY 1974

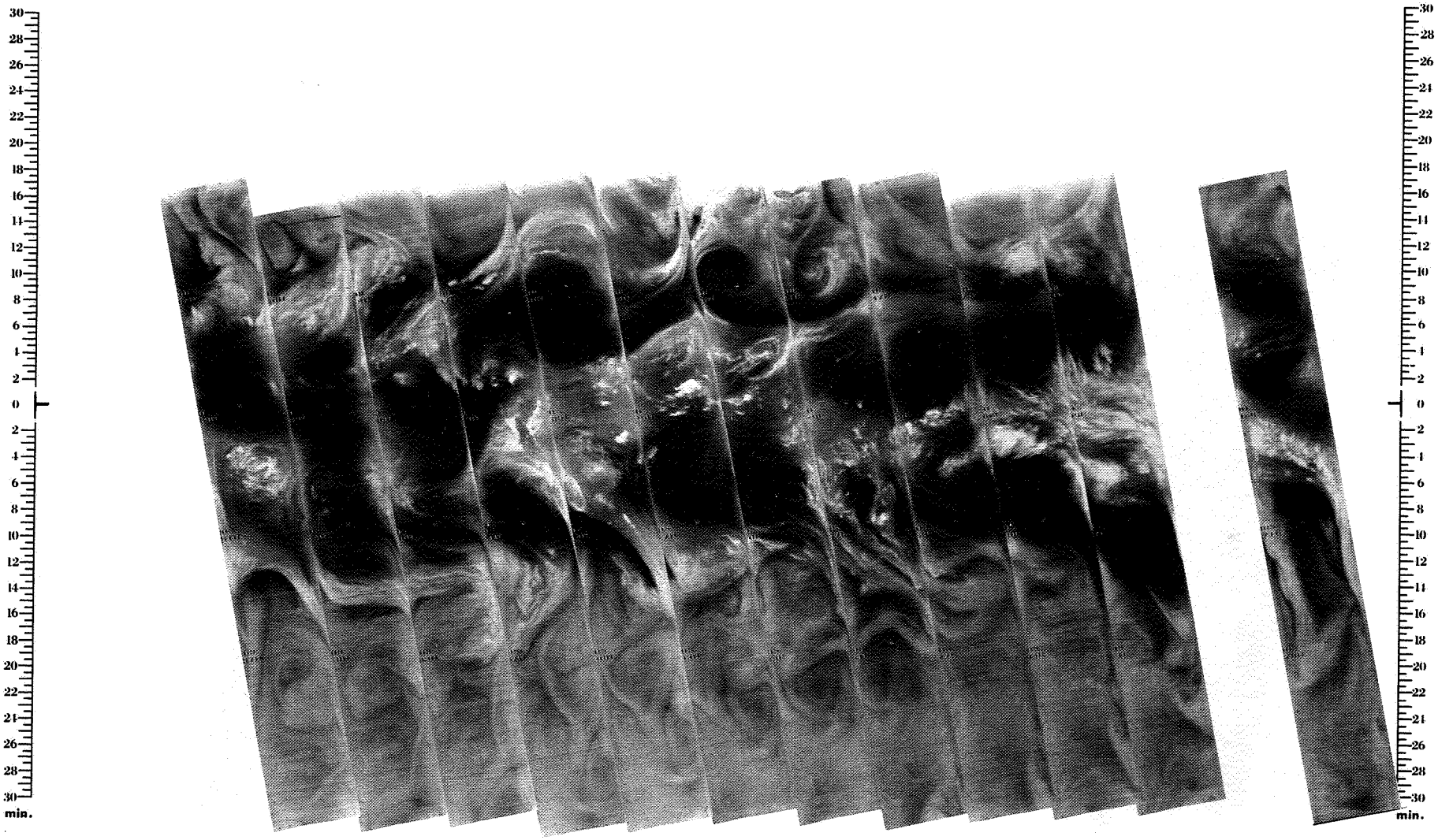
6.7 μm



5325 5324 5323 5322 5321 5320 5319 5318 5317 5316 5315 5314 5313 5312

11 JANUARY 1974

11.5 μm



5325 5324 5323 5322 5321 5320 5319 5318 5317 5316 5315 5314 5313 5312

11 JANUARY 1974

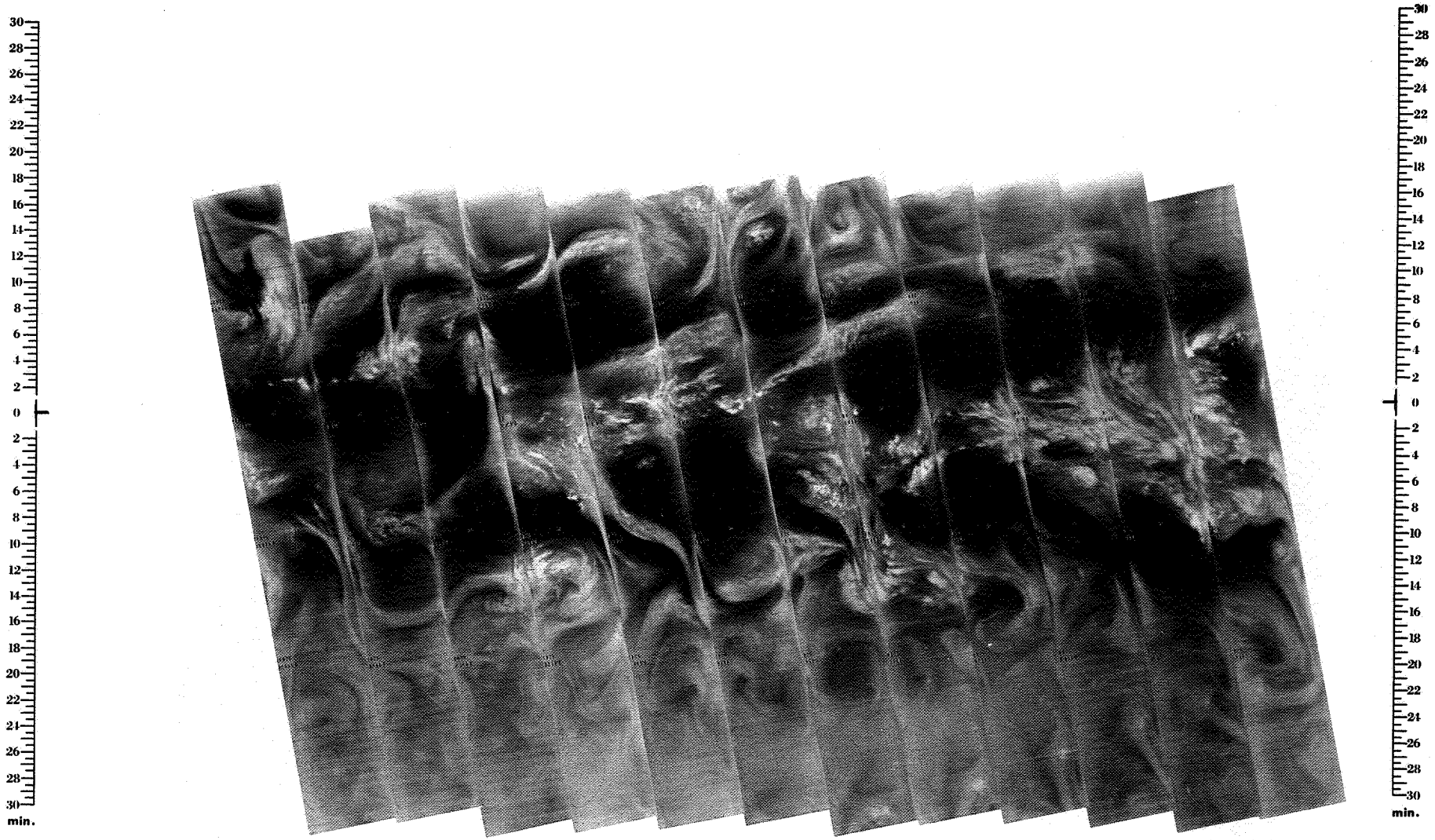
6.7 μm



5338 5337 5336 5335 5334 5333 5332 5331 5330 5329 5328 5327 5326

12 JANUARY 1974

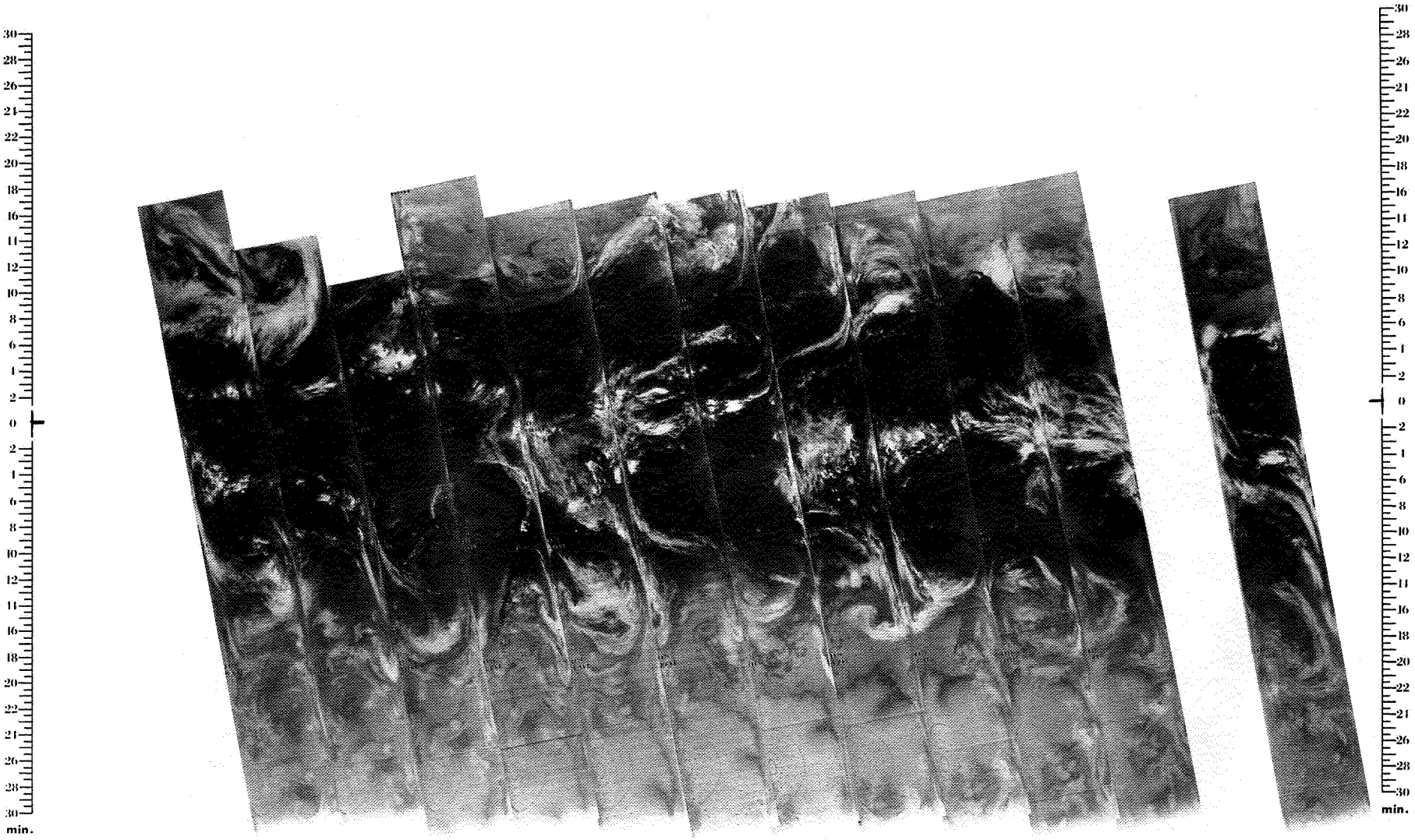
11.5 μm



5338 5337 5336 5335 5334 5333 5332 5331 5330 5329 5328 5327 5326

12 JANUARY 1974

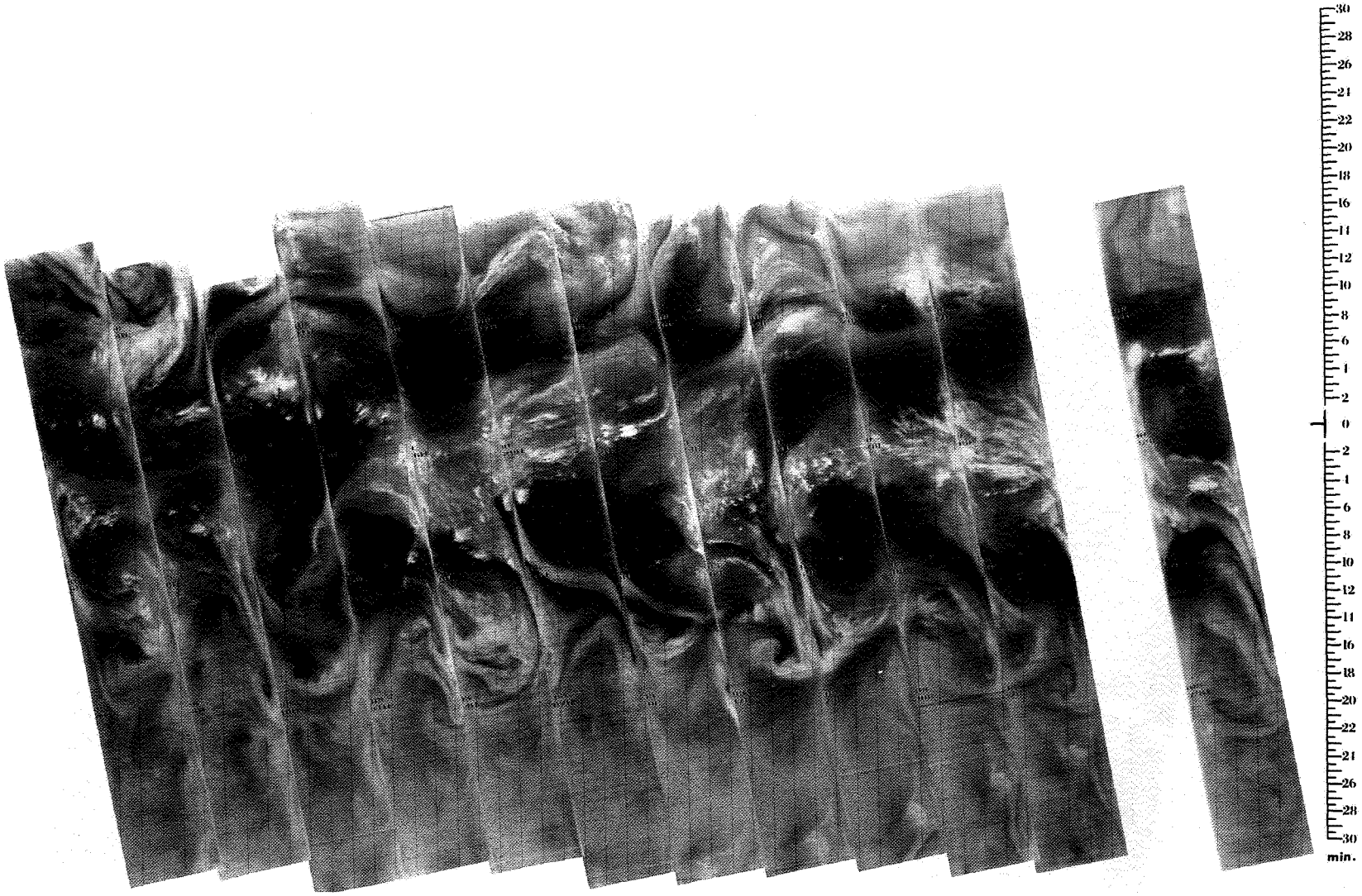
6.7 μm

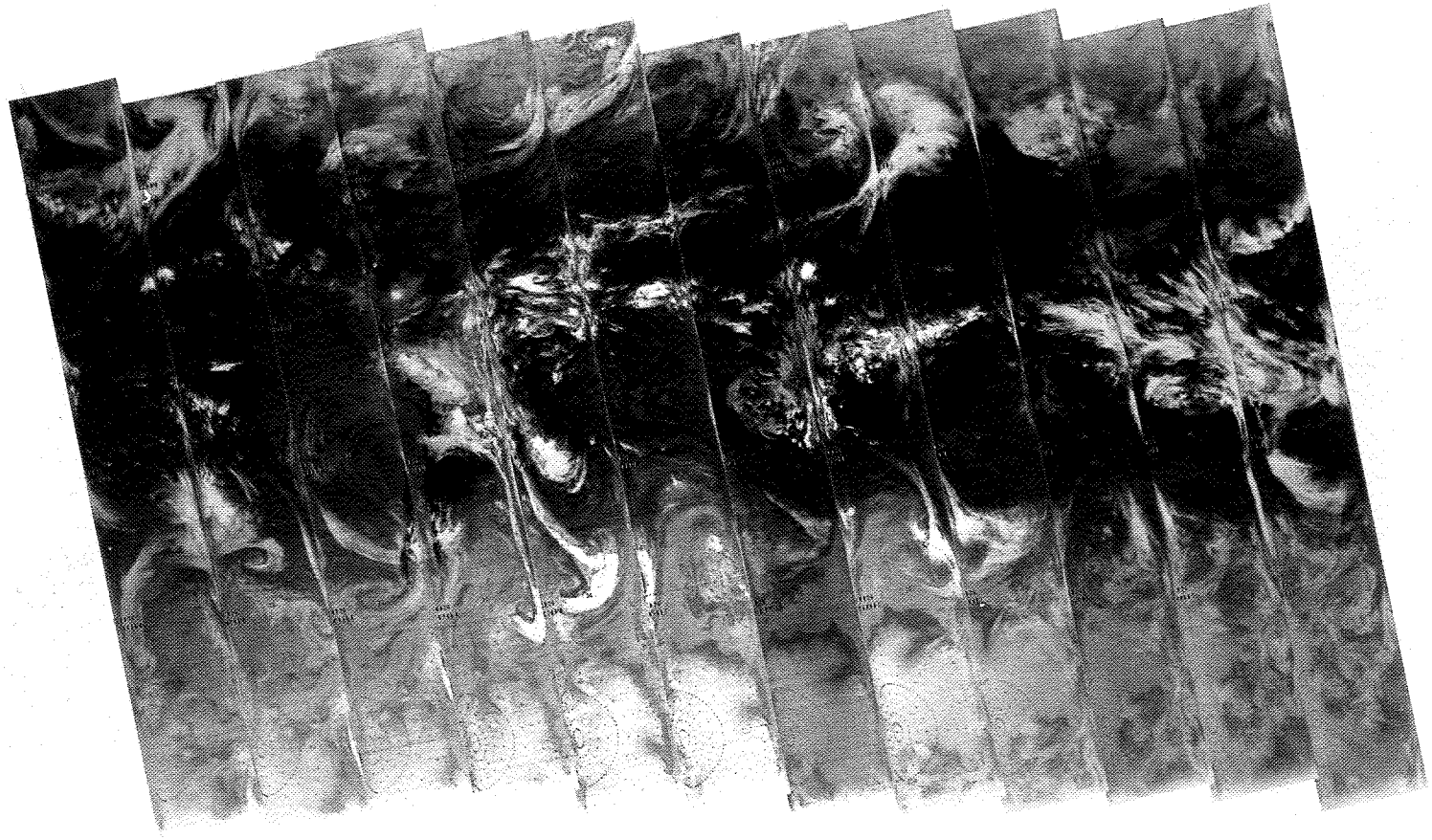


5351 5350 5349 5348 5347 5346 5345 5344 5343 5342 5341 5340 5339

13 JANUARY 1974

11.5 μm

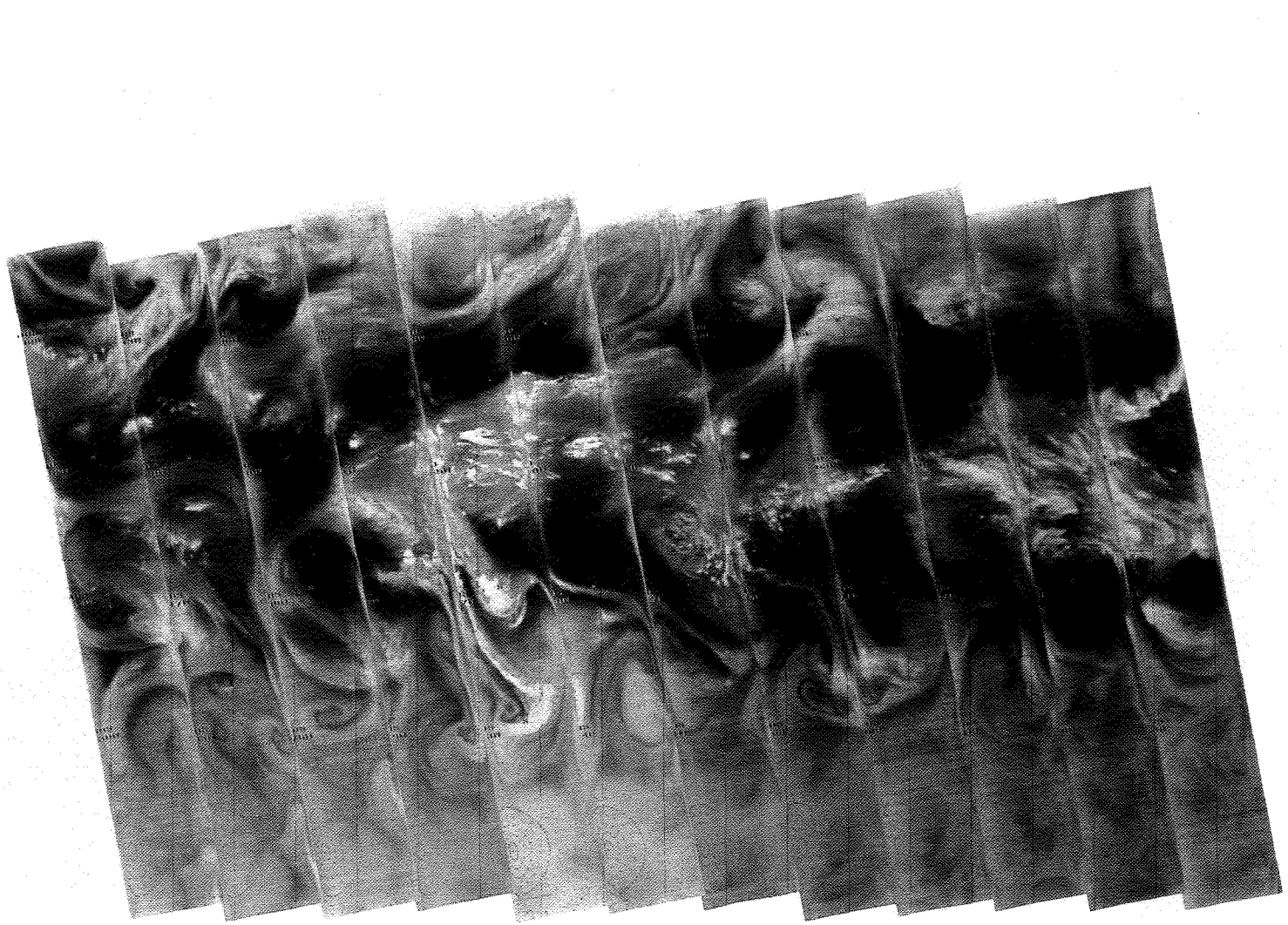

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
5351 5350 5349 5348 5347 5346 5345 5344 5343 5342 5341 5340 5339
13 JANUARY 1974
6.7 μm



5365 5364 5363 5362 5361 5360 5359 5358 5357 5356 5355 5354 5353 5352

14 JANUARY 1974

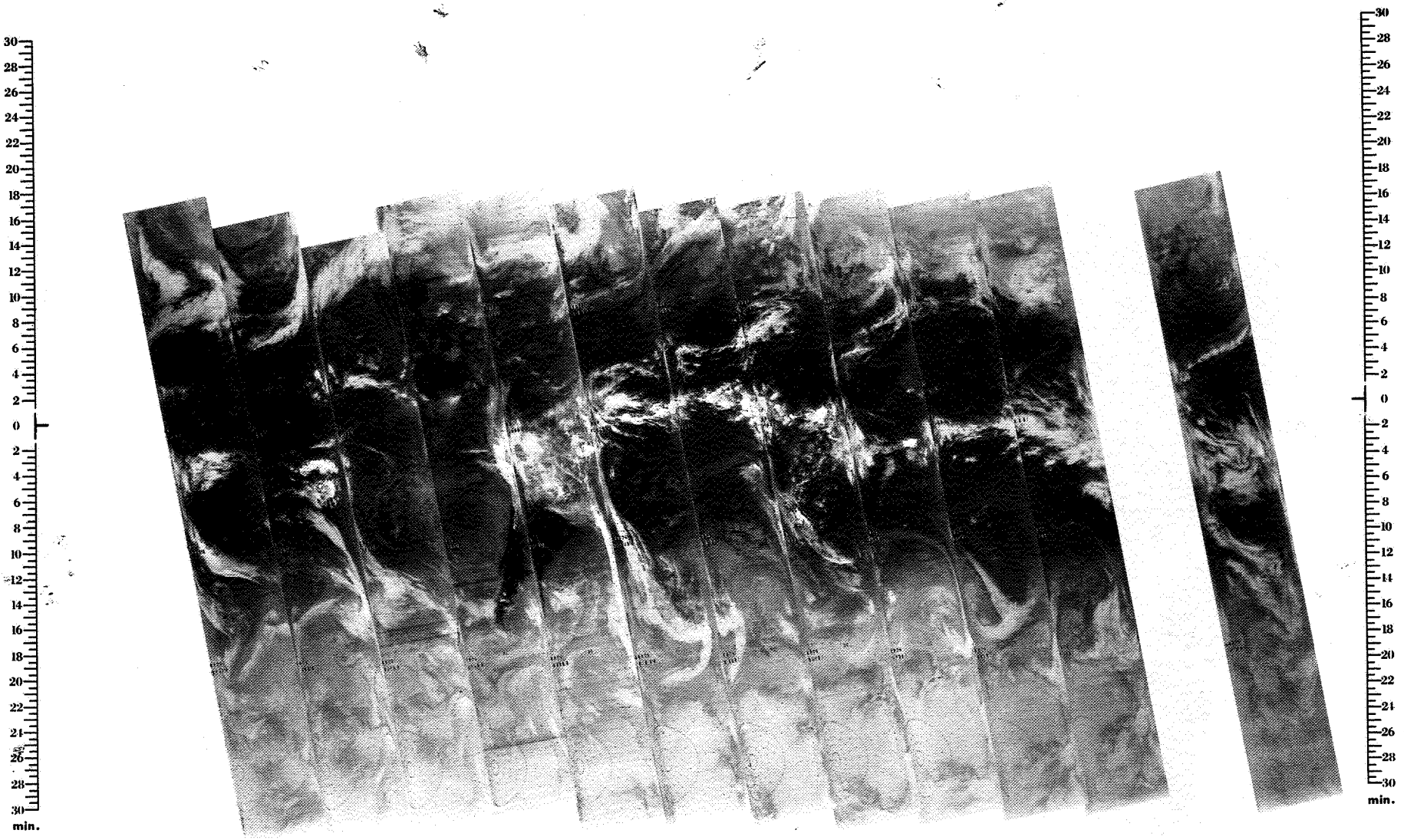
11.5 μm



5365 5364 5363 5362 5361 5360 5359 5358 5357 5356 5355 5354 5353 5352

14 JANUARY 1974

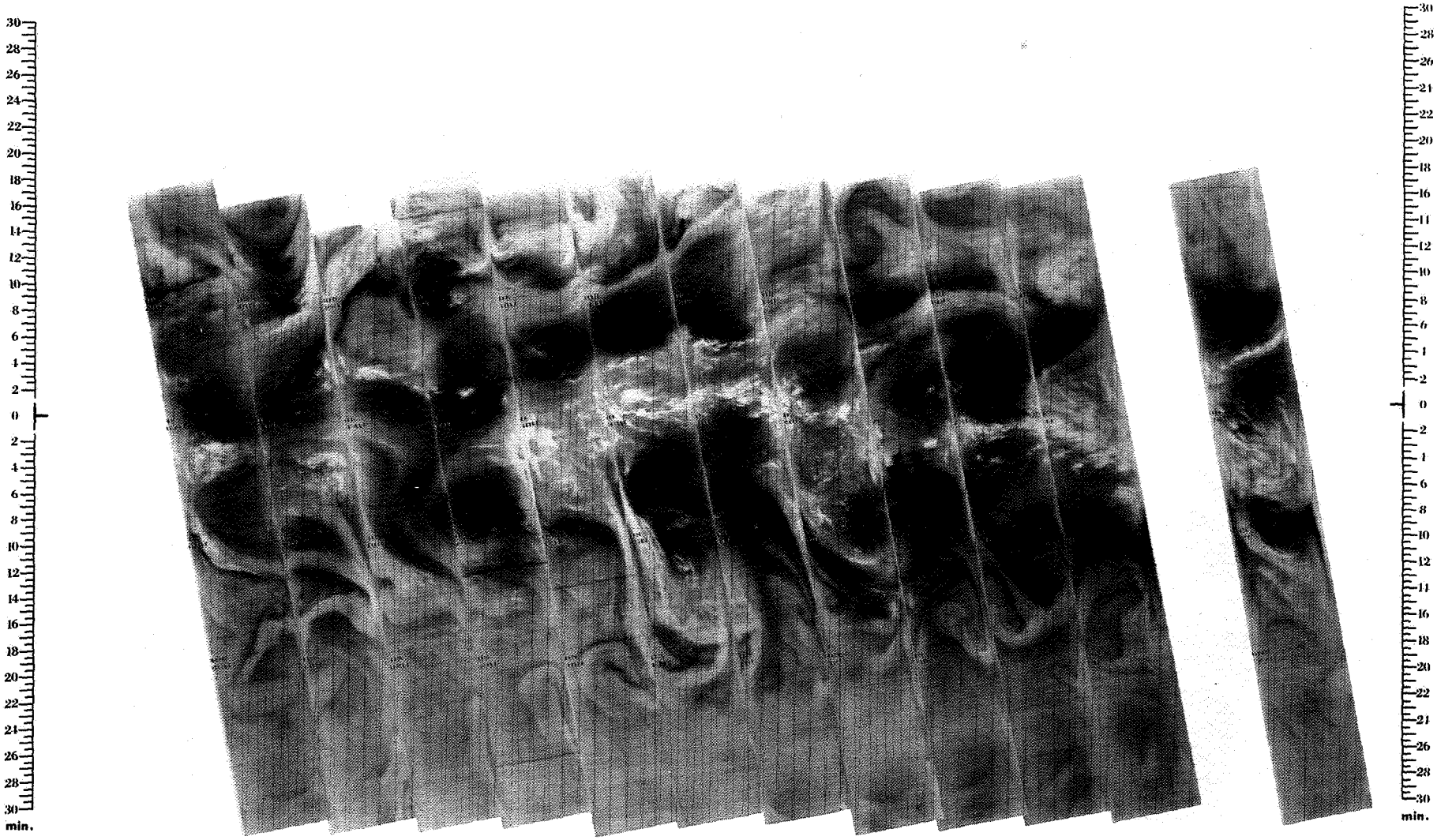
6.7 μm



5378 5377 5376 5375 5374 5373 5372 5371 5370 5369 5368 5367 5366

15 JANUARY 1974

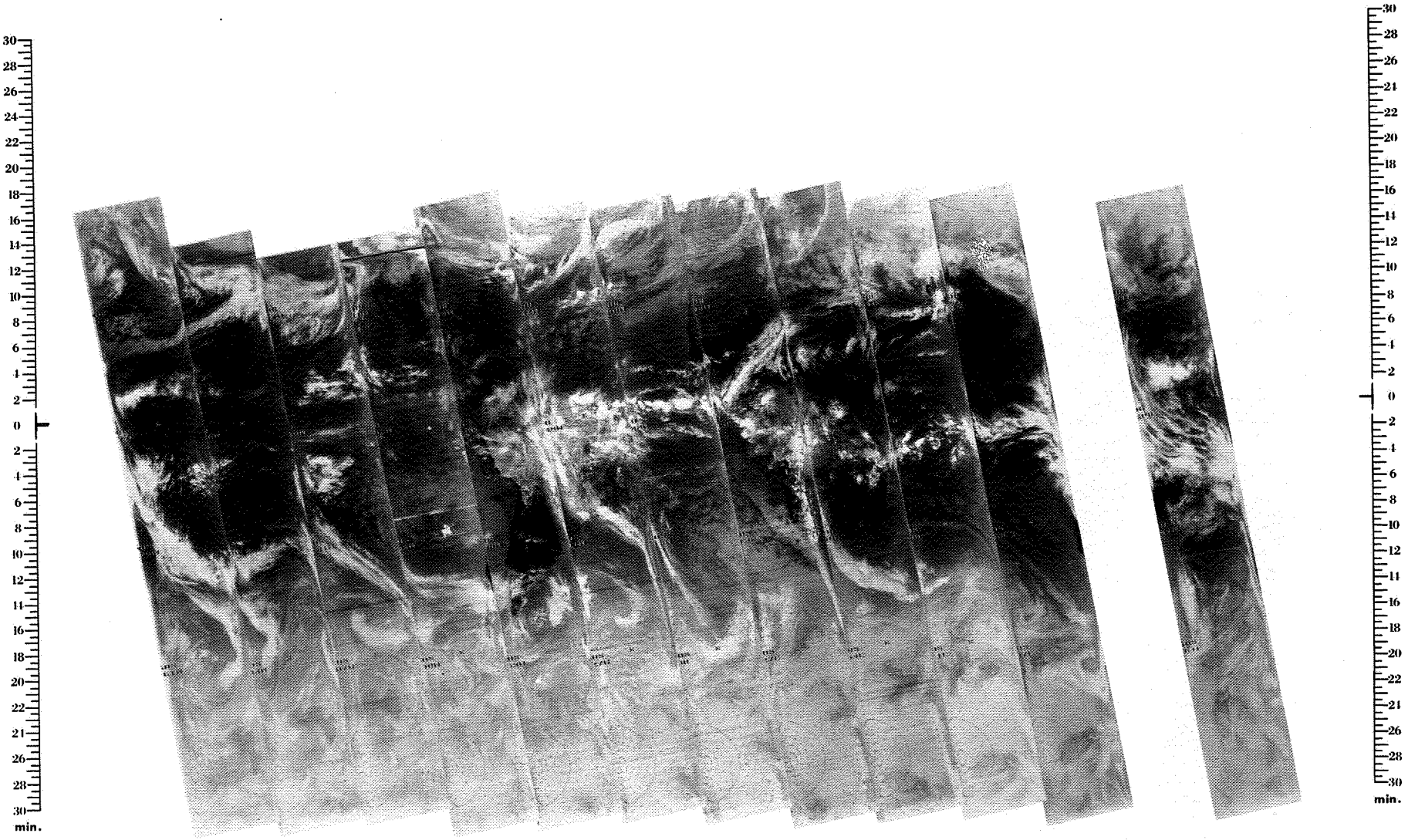
11.5 μm



5378 5377 5376 5375 5374 5373 5372 5371 5370 5369 5368 5367 5366

15 JANUARY 1974

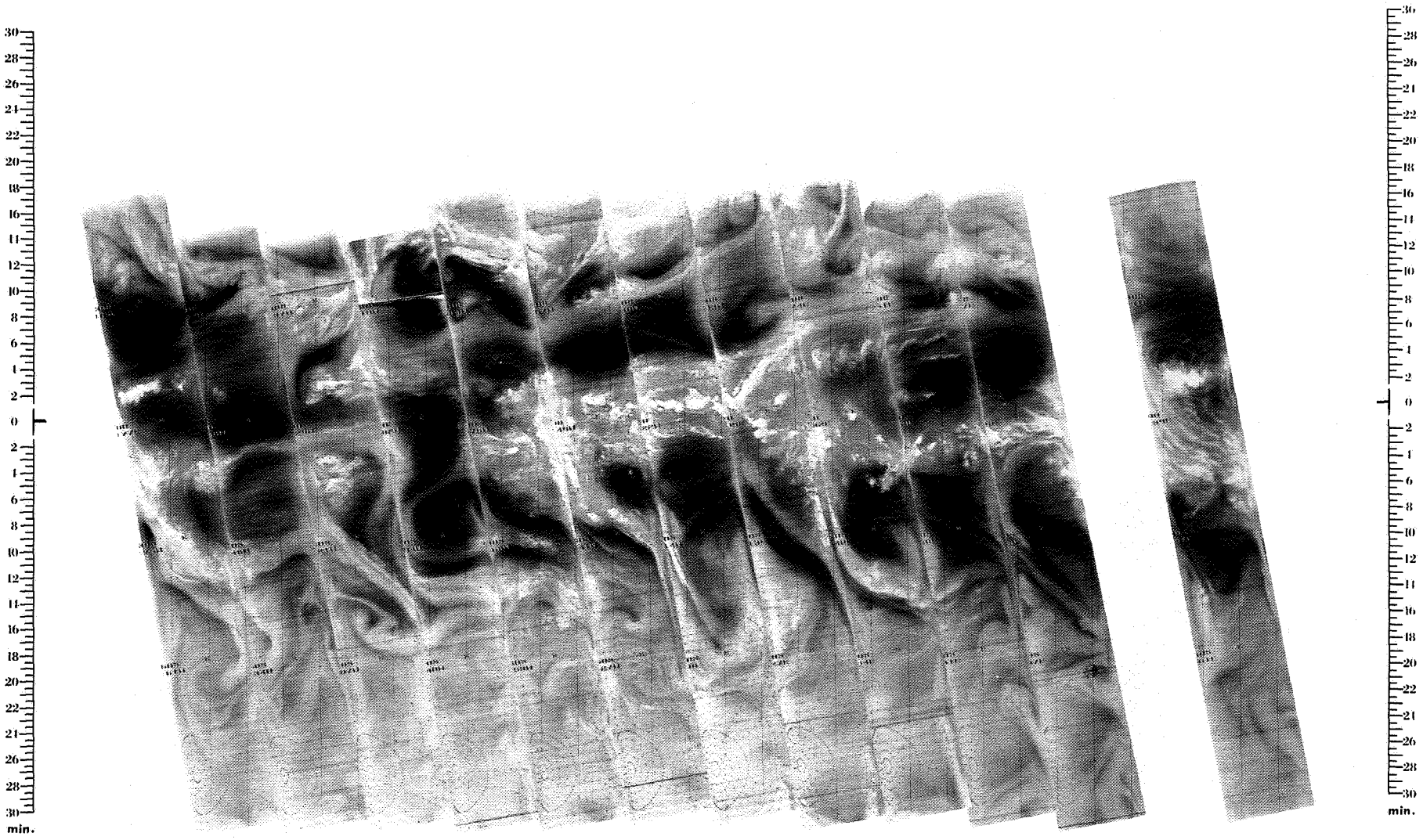
6.7 μm



5392 5391 5390 5389 5388 5387 5386 5385 5384 5383 5382 5381 5380 5379

16 JANUARY 1974

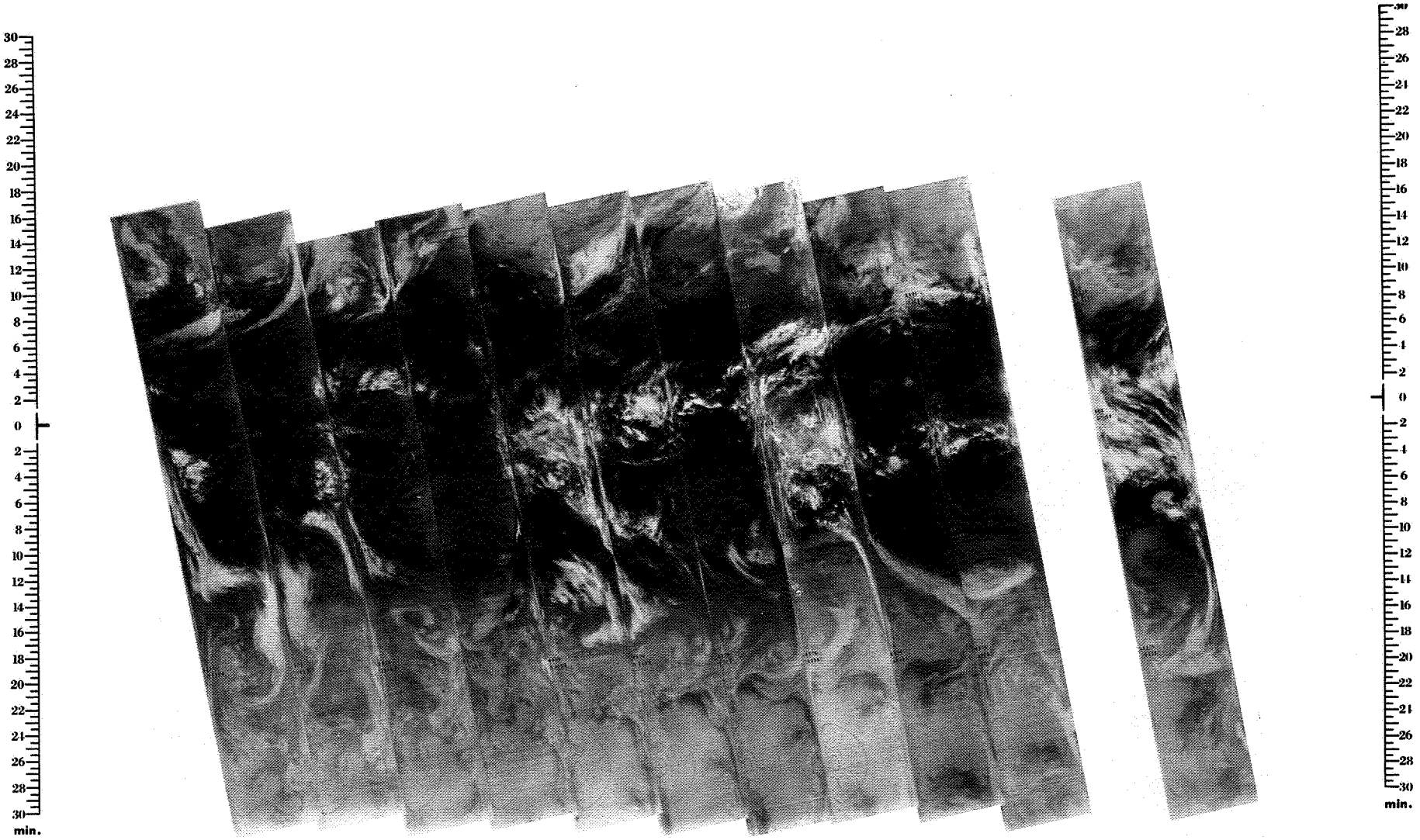
11.5 μm



5392 5391 5390 5389 5388 5387 5386 5385 5384 5383 5382 5381 5380 5379

16 JANUARY 1974

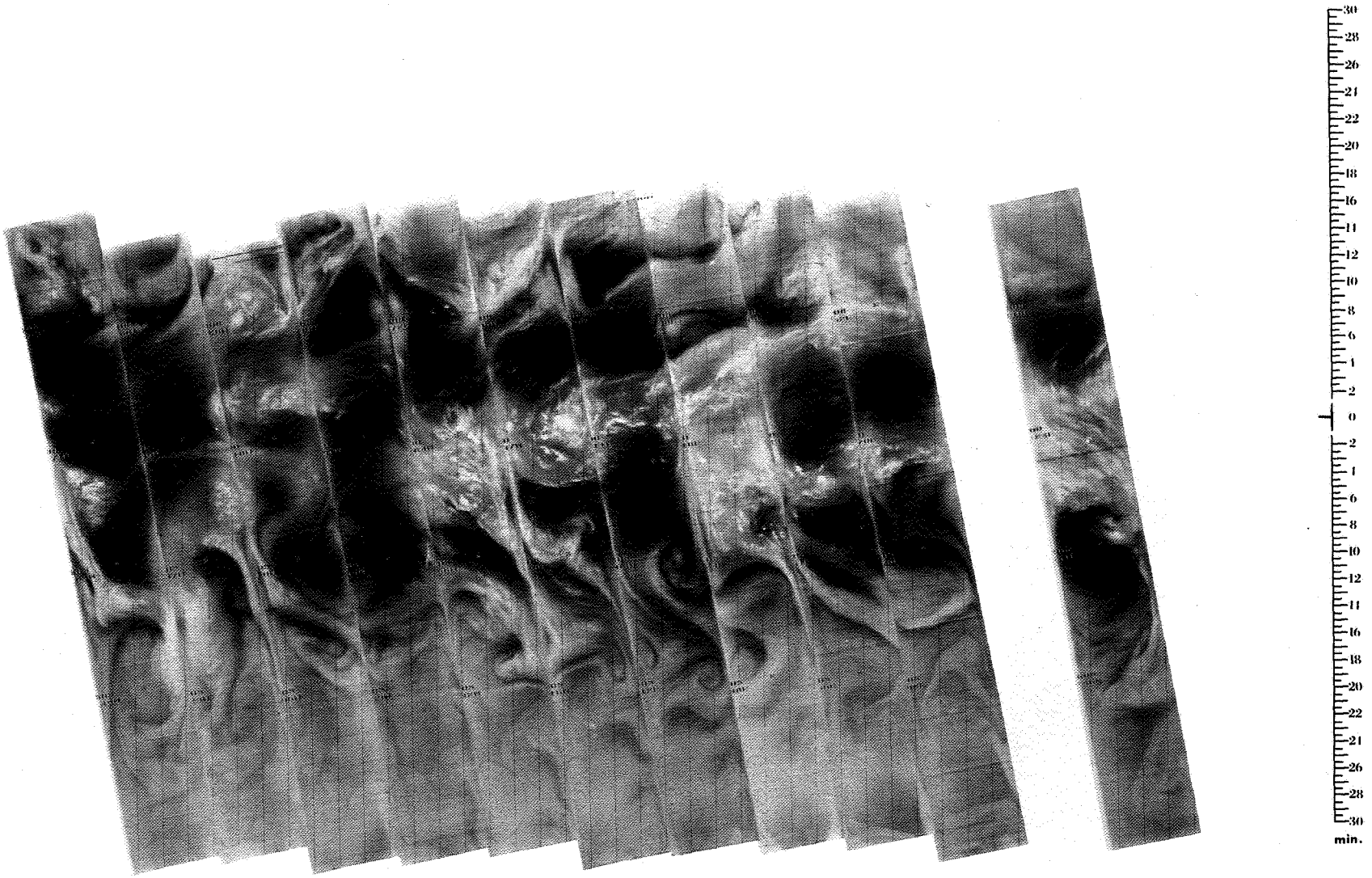
6.7 μm



5405 5404 5403 5402 5401 5400 5399 5398 5397 5396 5395 5394 5393

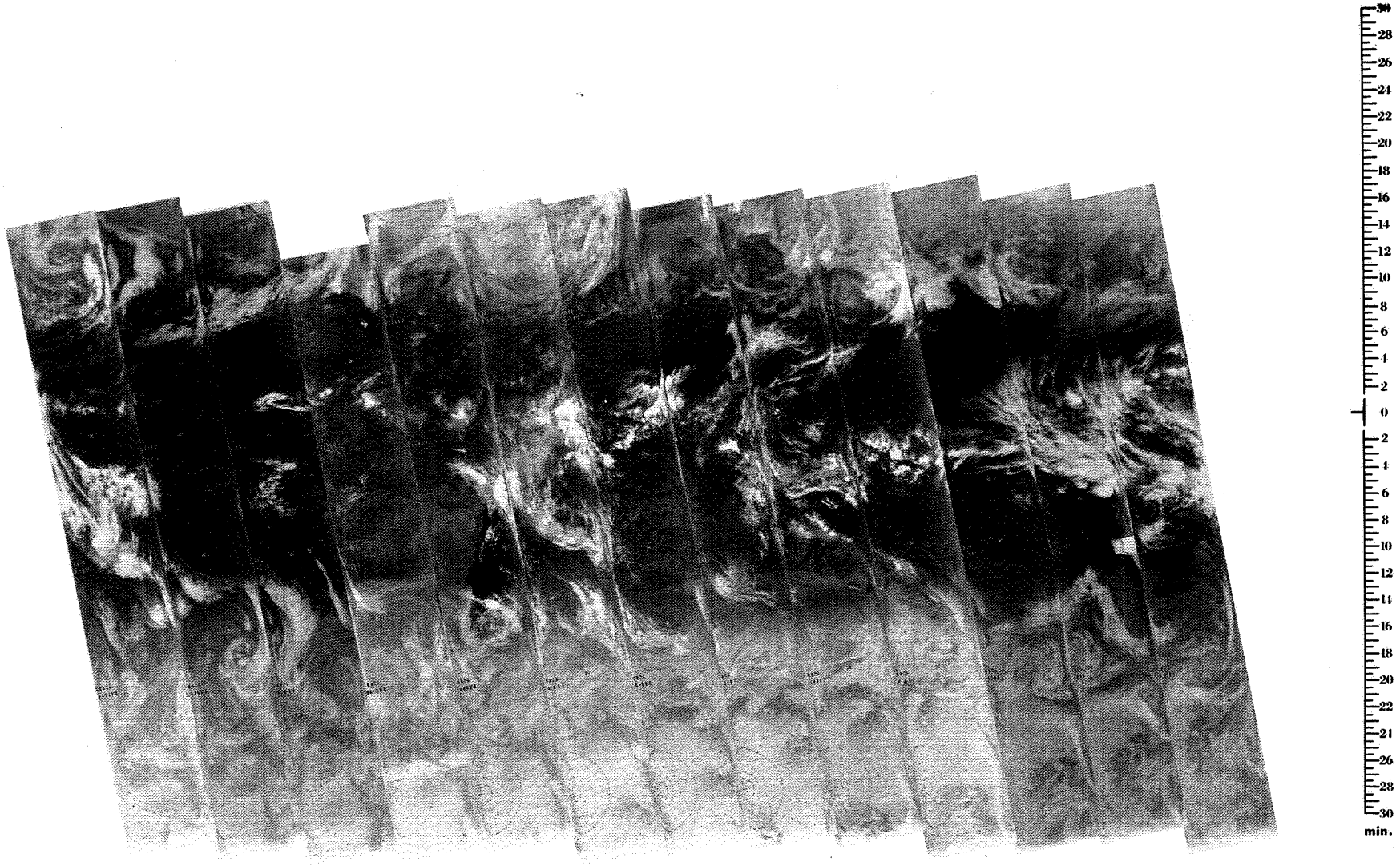
17 JANUARY 1974

11.5 μm



17 JANUARY 1974

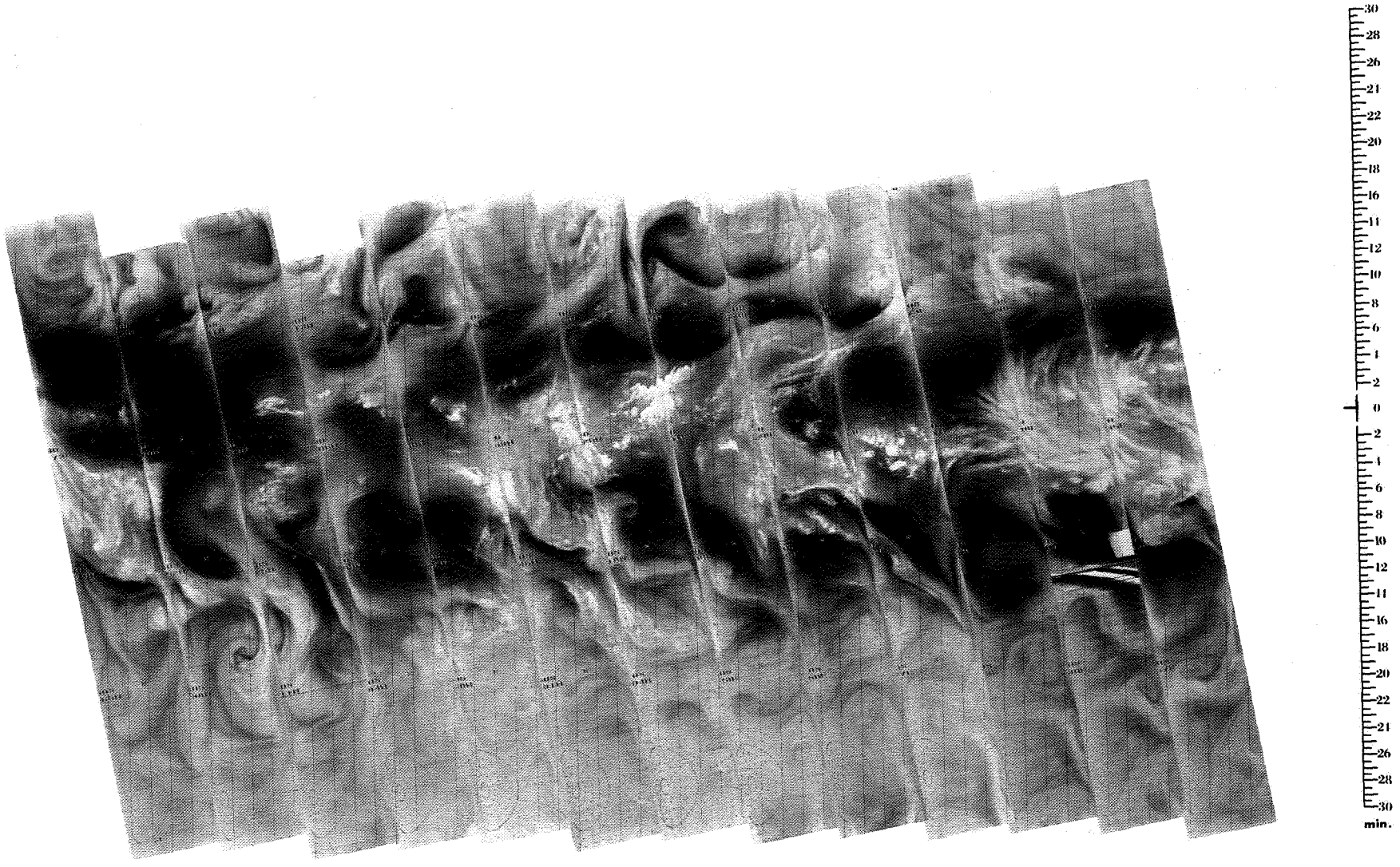
6.7 μm



5419 5418 5417 5416 5415 5414 5413 5412 5411 5410 5409 5408 5407 5406

18 JANUARY 1974

11.5 μm

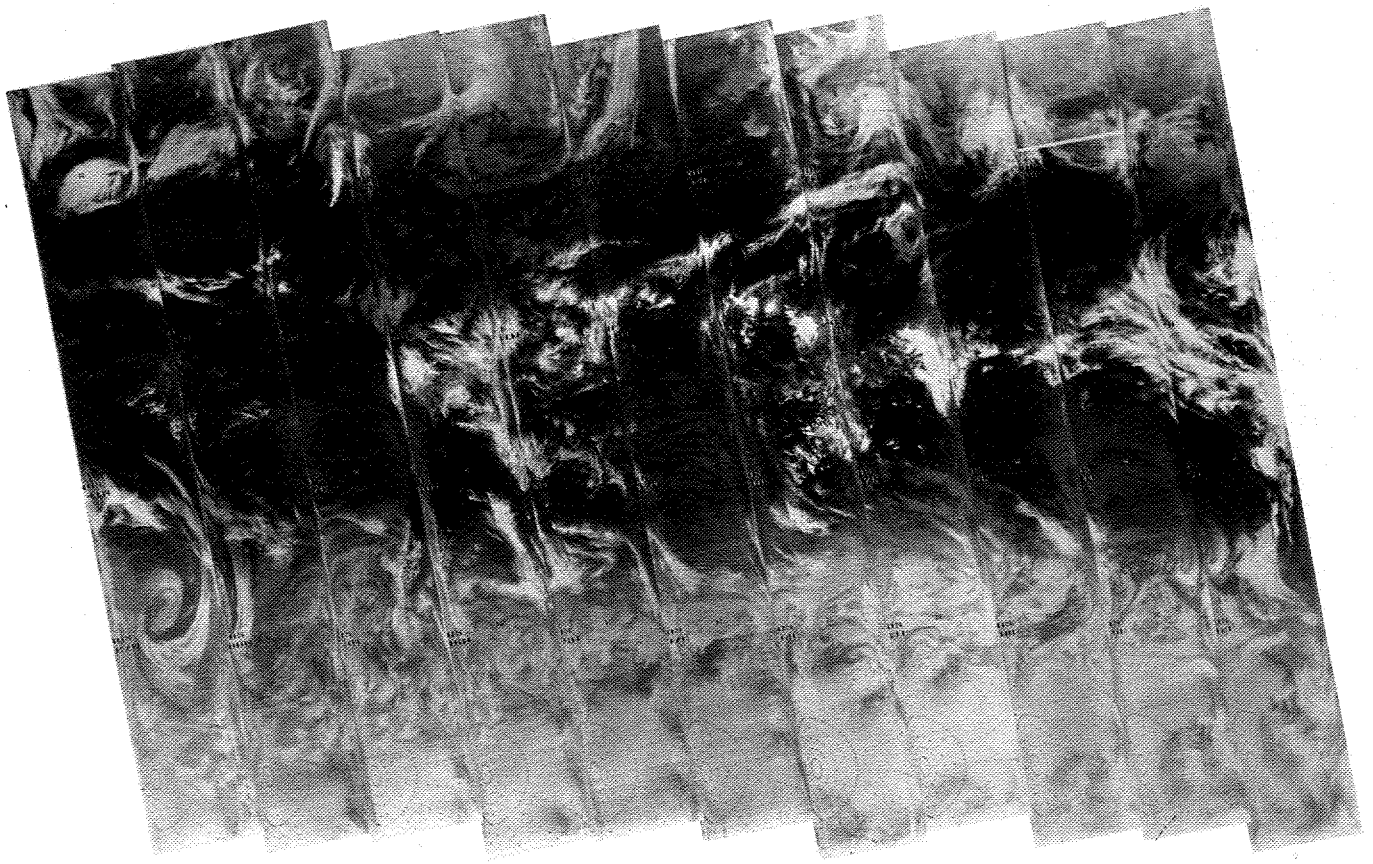


4-227

5419 5418 5417 5416 5415 5414 5413 5412 5411 5410 5409 5408 5407 5406

18 JANUARY 1974

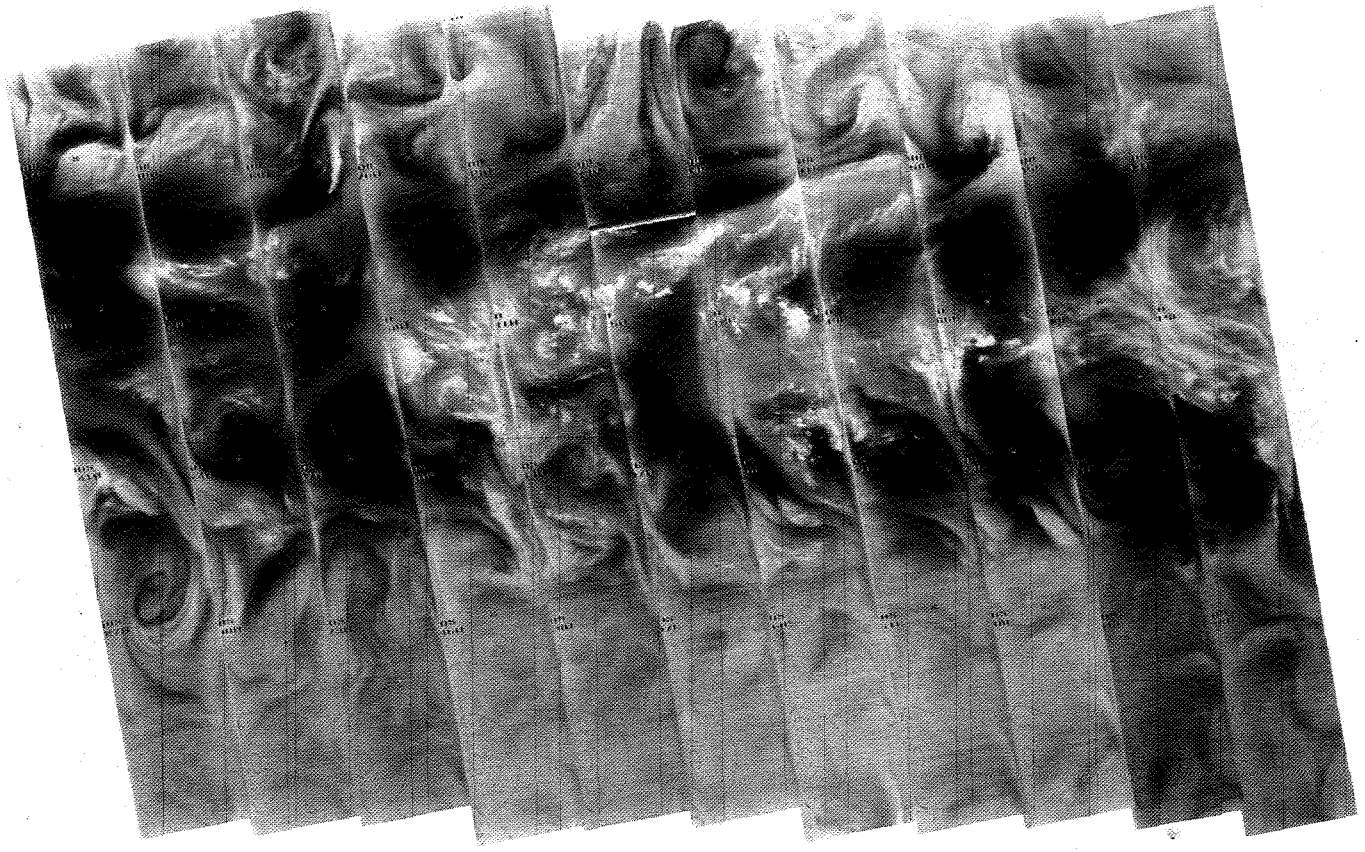
6.7 μm



5432 5431 5430 5429 5428 5427 5426 5425 5424 5423 5422 5421 5420

19 JANUARY 1974

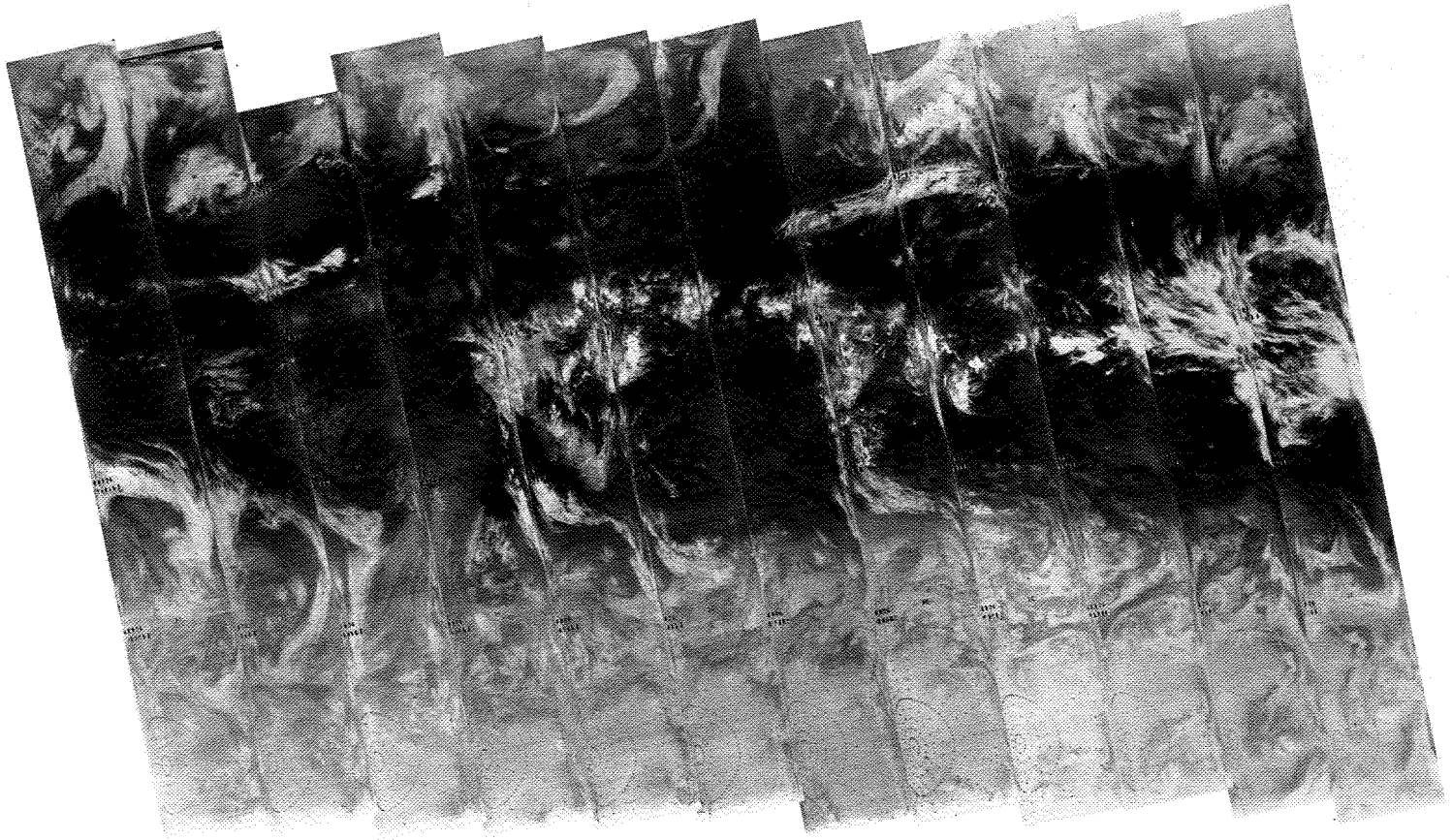
11.5 μm



5432 5431 5430 5429 5428 5427 5426 5425 5424 5423 5422 5421 5420

19 JANUARY 1974

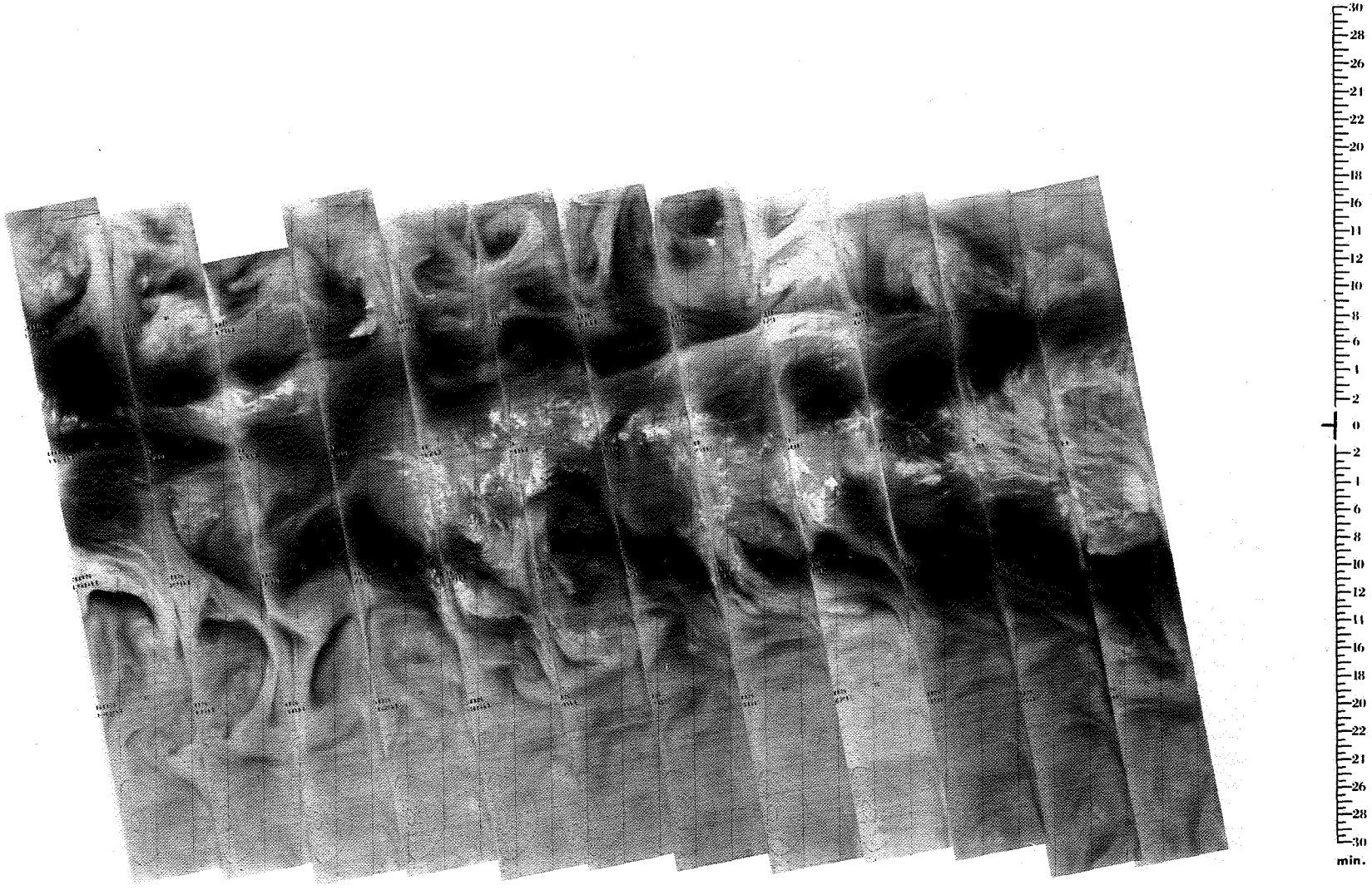
6.7 μm



5445 5444 5443 5442 5441 5440 5439 5438 5437 5436 5435 5434 5433

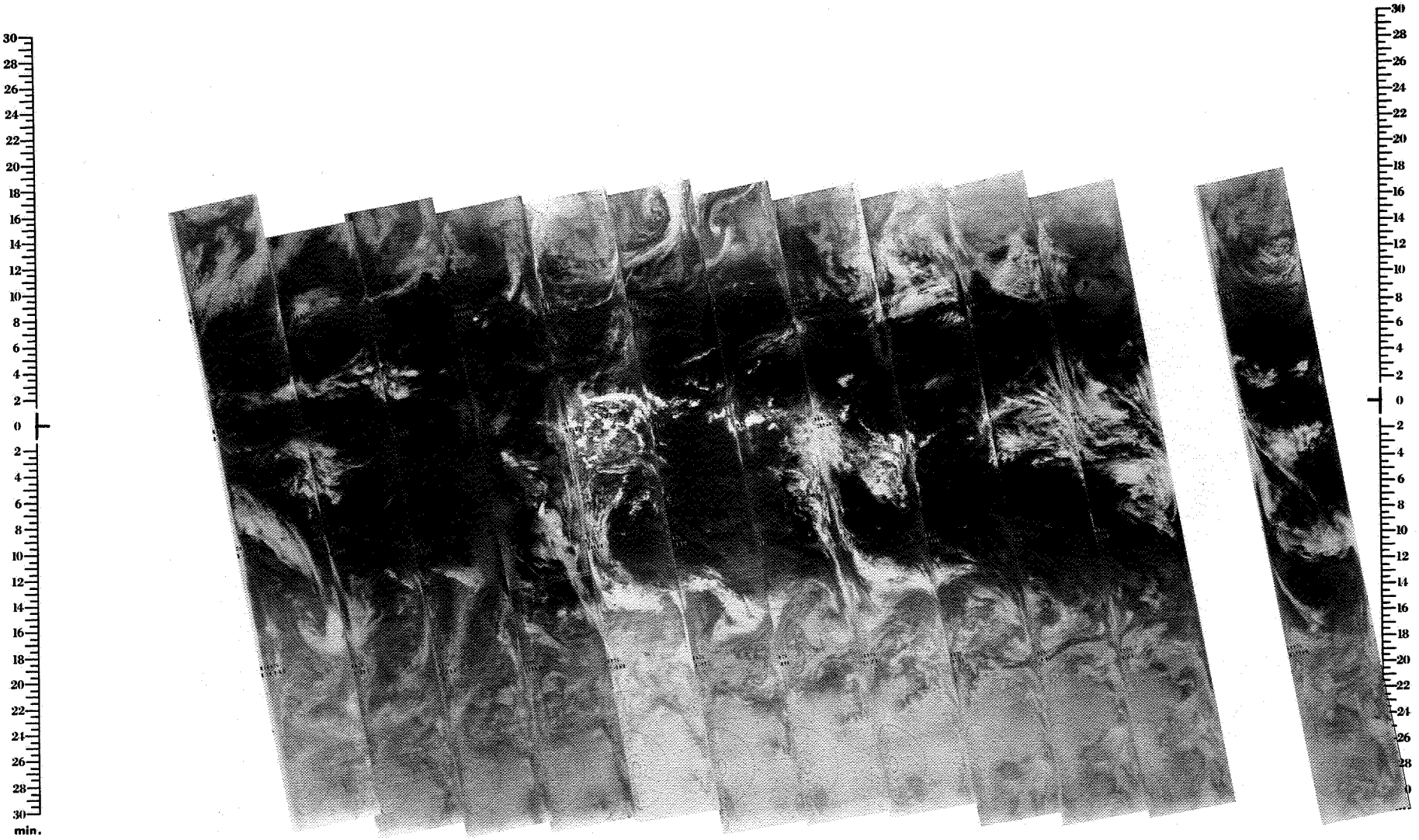
20 JANUARY 1974

11.5 μm



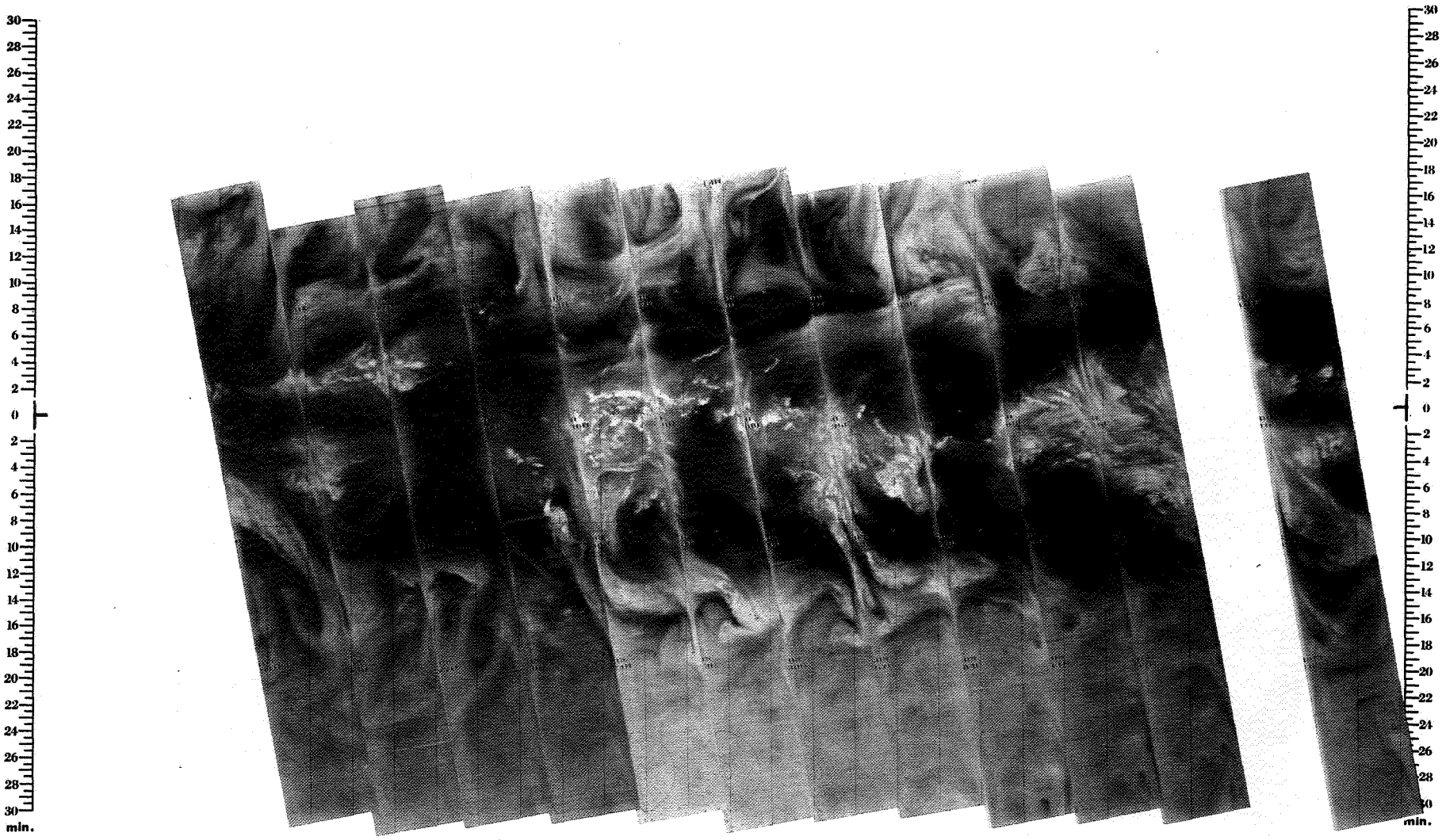
20 JANUARY 1974

6.7 μm



21 JANUARY 1974

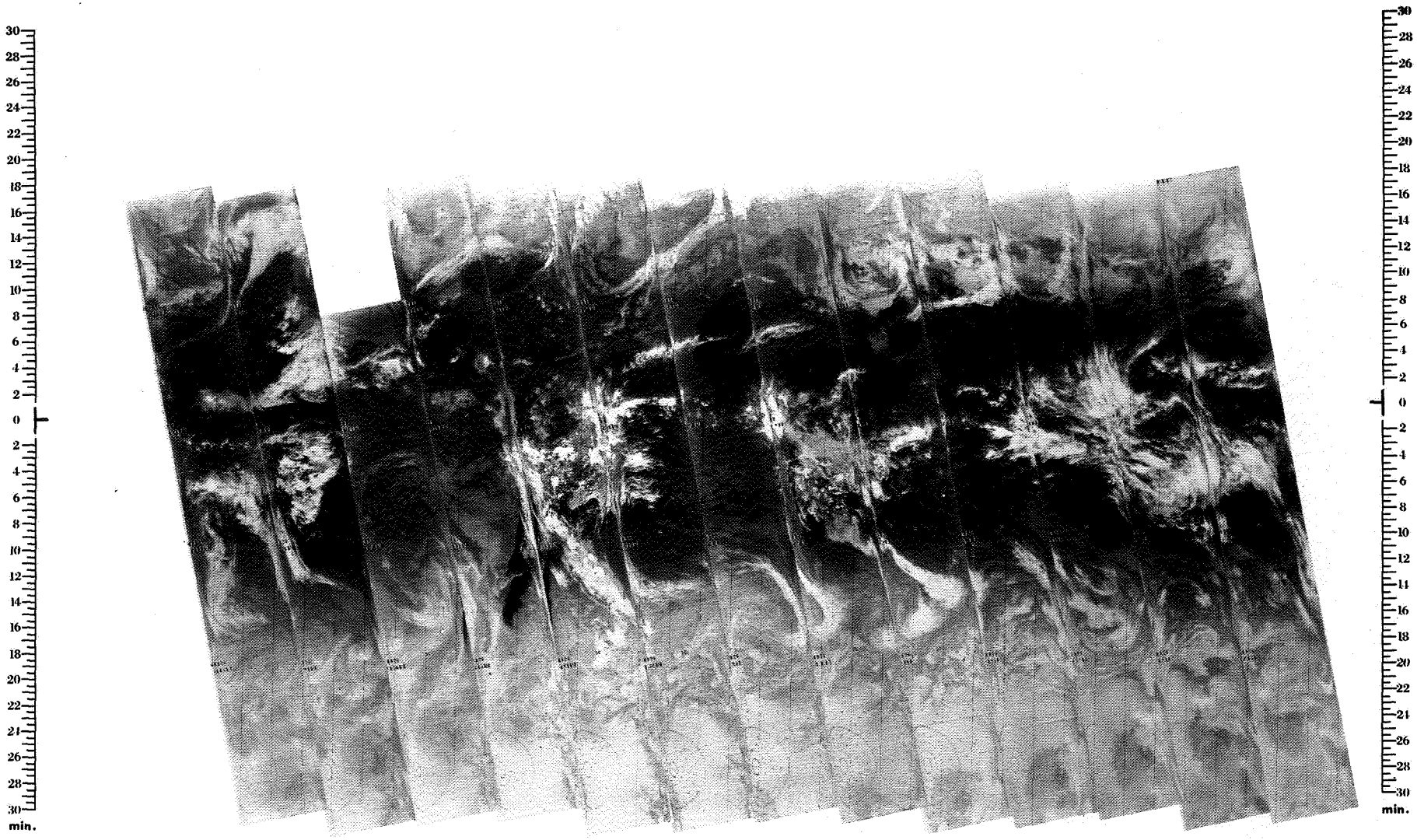
11.5 μm



5459 5458 5457 5456 5455 5454 5453 5452 5451 5450 5449 5448 5447 5446

21 JANUARY 1974

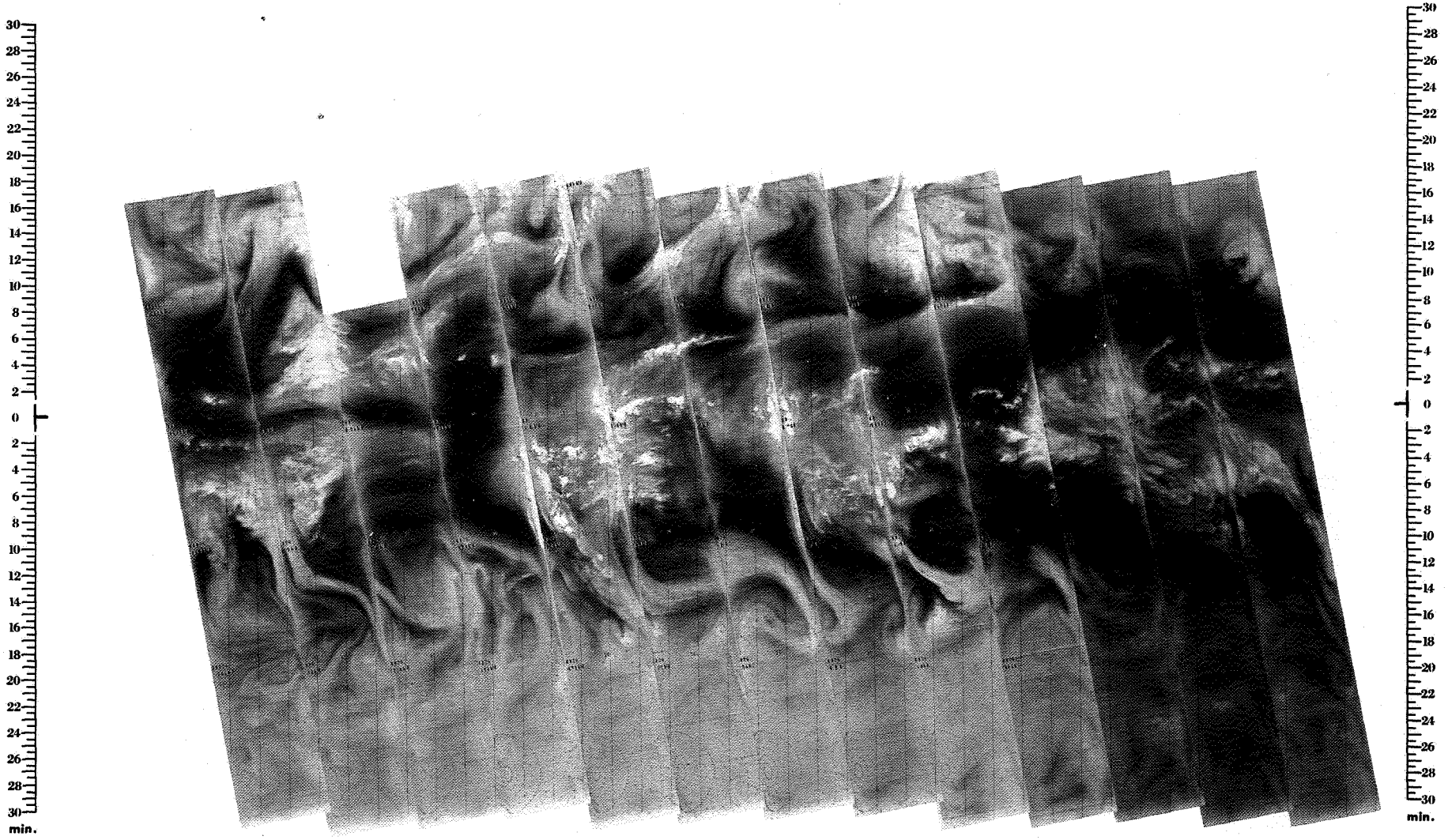
6.7 μm



5472 5471 5470 5469 5468 5467 5466 5465 5464 5463 5462 5461 5460

22 JANUARY 1974

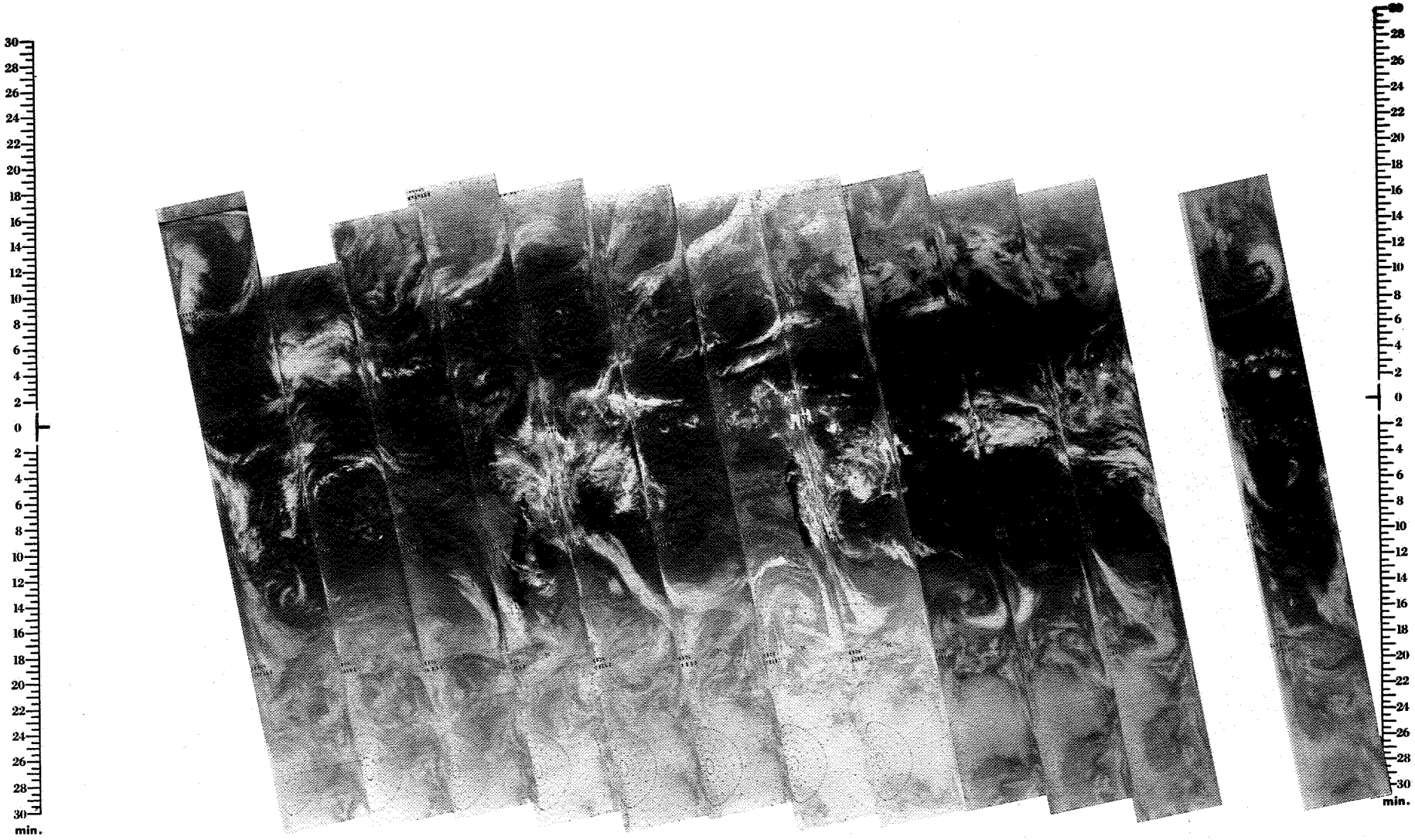
11.5 μm



5472 5471 5470 5469 5468 5467 5466 5465 5464 5463 5462 5461 5460

22 JANUARY 1974

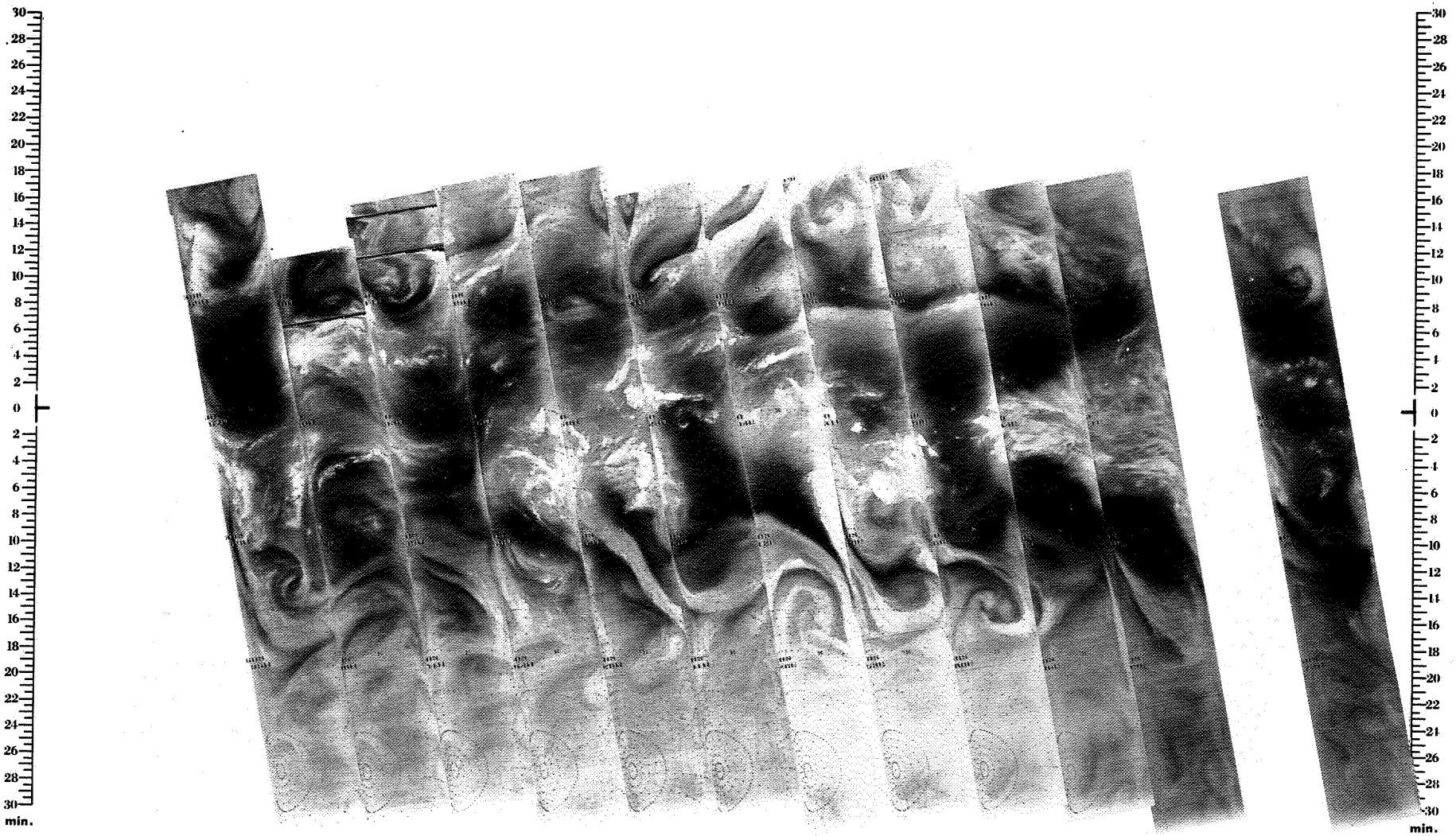
6.7 μm



5486 5485 5484 5483 5482 5481 5480 5479 5478 5477 5476 5475 5474 5473

23 JANUARY 1974

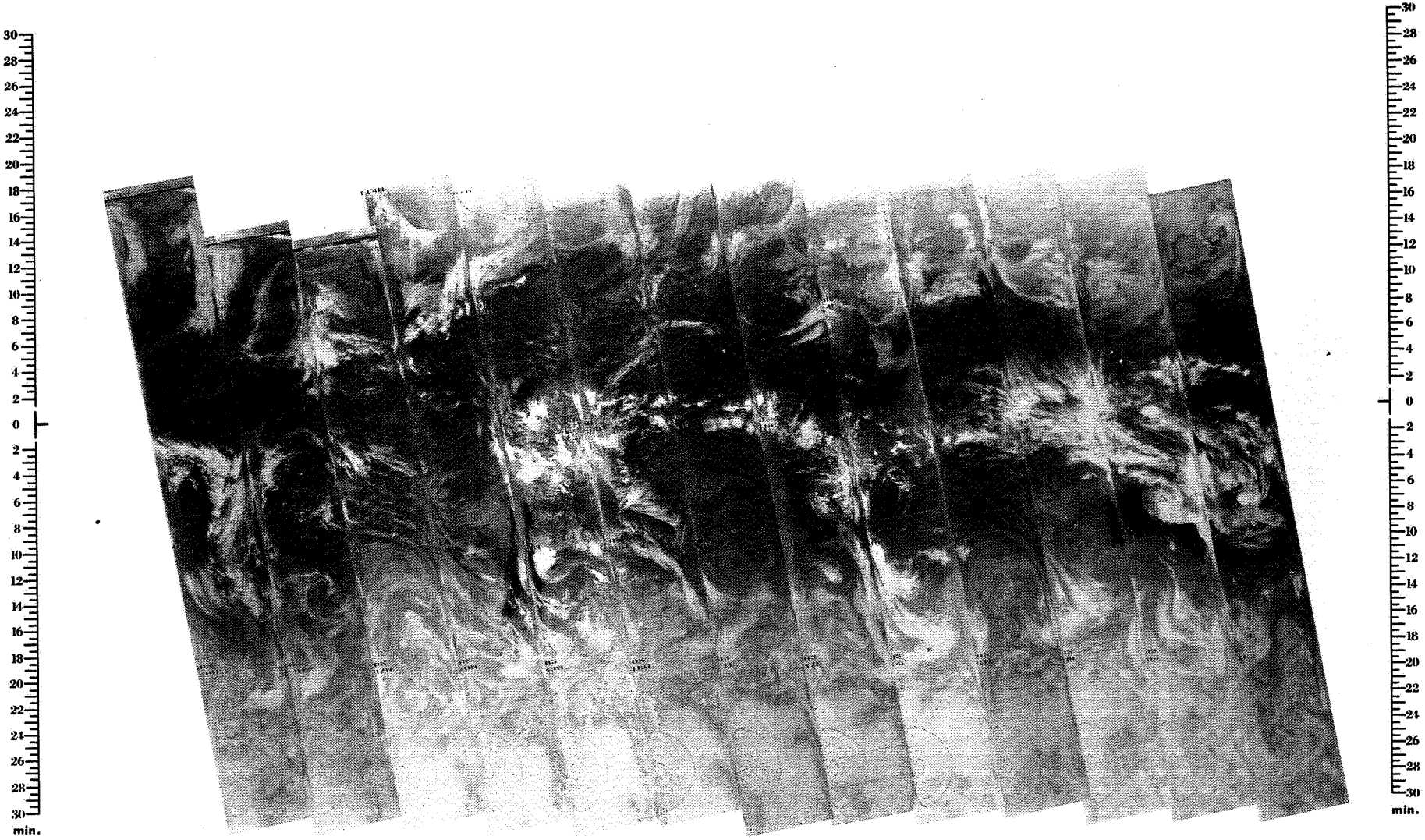
11.5 μm



5486 5485 5484 5483 5482 5481 5480 5479 5478 5477 5476 5475 5474 5473

23 JANUARY 1974

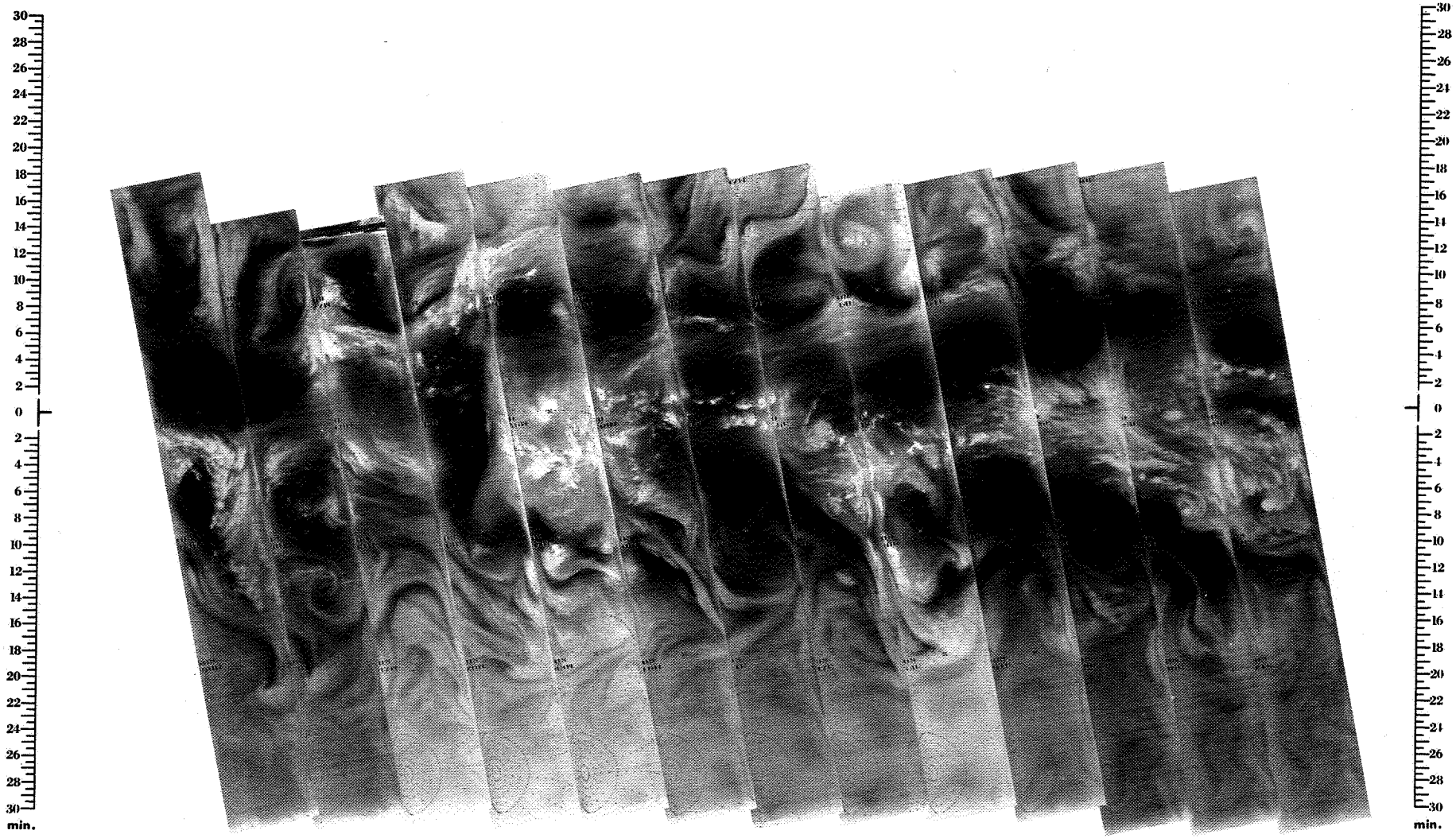
6.7 μm



5499 5498 5497 5496 5495 5494 5493 5492 5491 5490 5489 5488 5487

24 JANUARY 1974

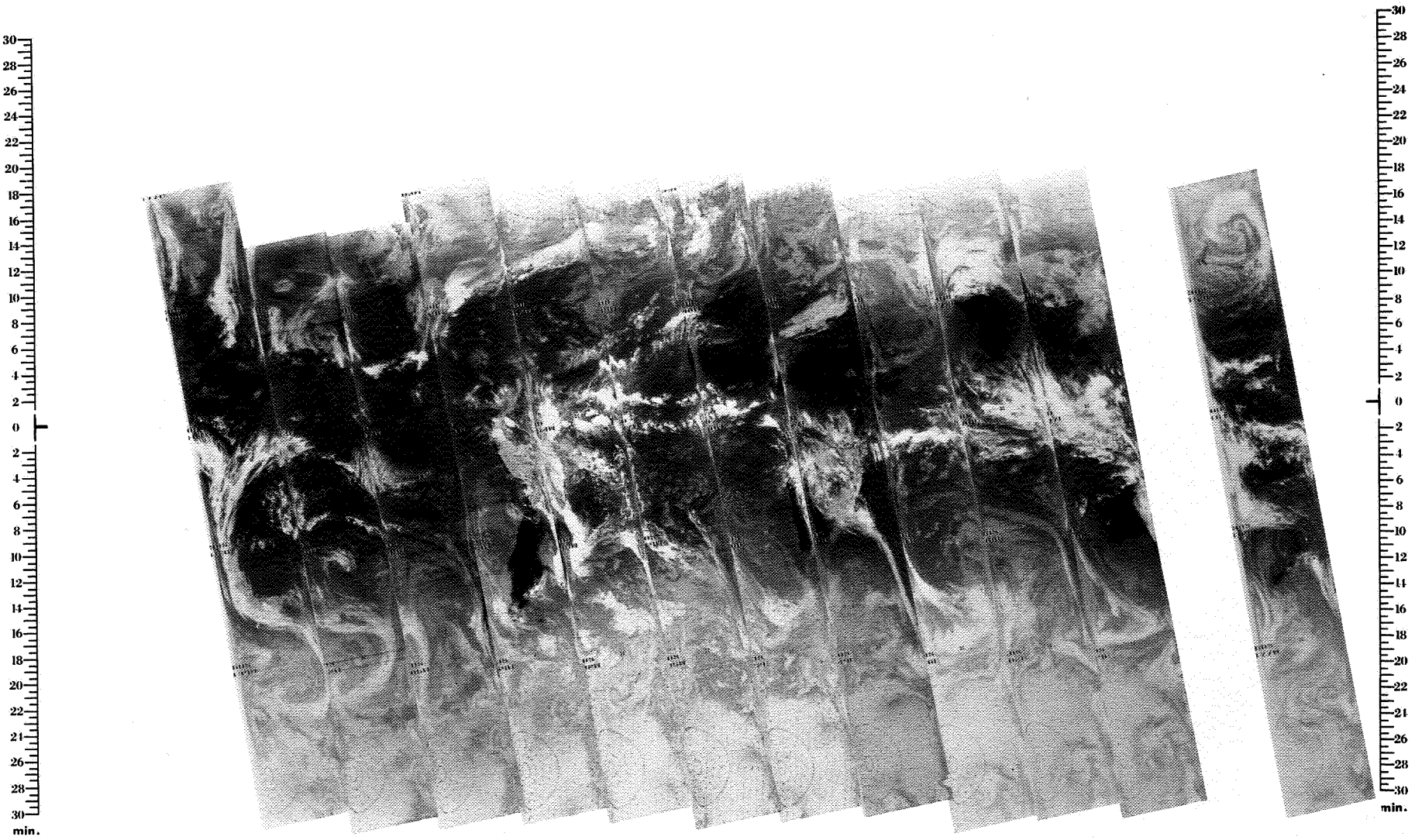
11.5 μm



5499 5498 5497 5496 5495 5494 5493 5492 5491 5490 5489 5488 5487

24 JANUARY 1974

6.7 μm

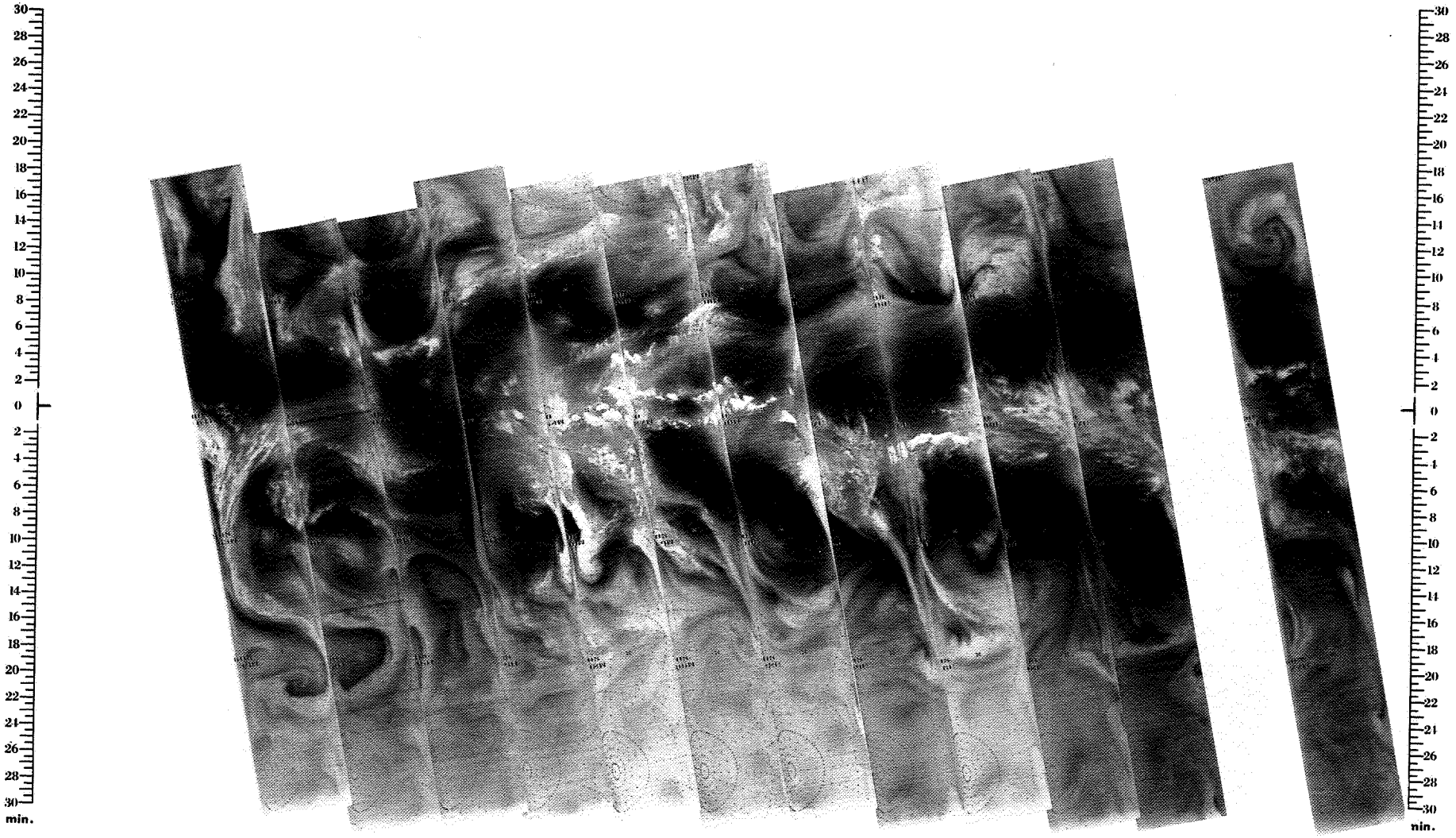


4-240

5512 5511 5510 5509 5508 5507 5506 5505 5504 5503 5502 5501 5500

25 JANUARY 1974

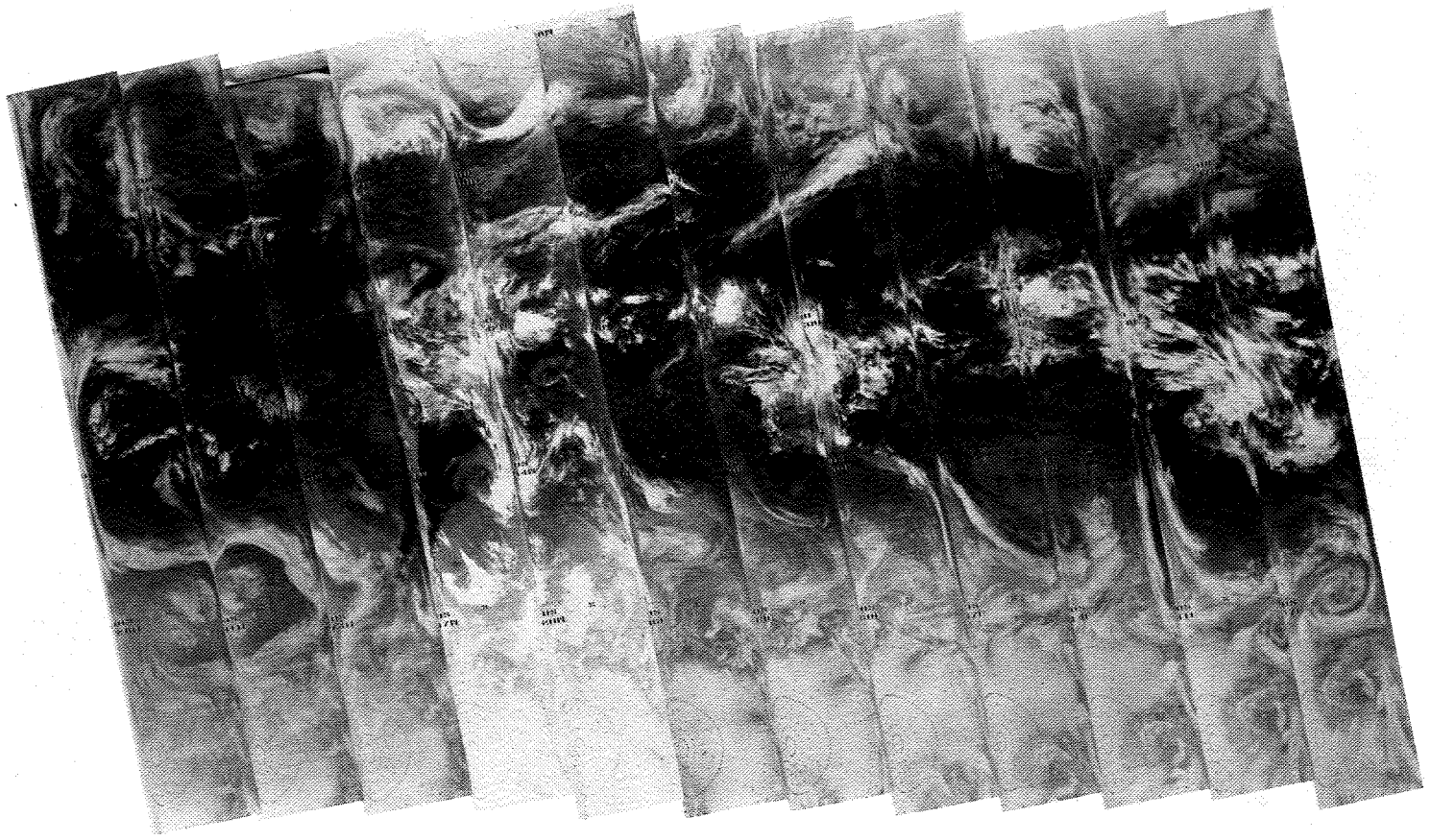
11.5 μm



5512 5511 5510 5509 5508 5507 5506 5505 5504 5503 5502 5501 5500

25 JANUARY 1974

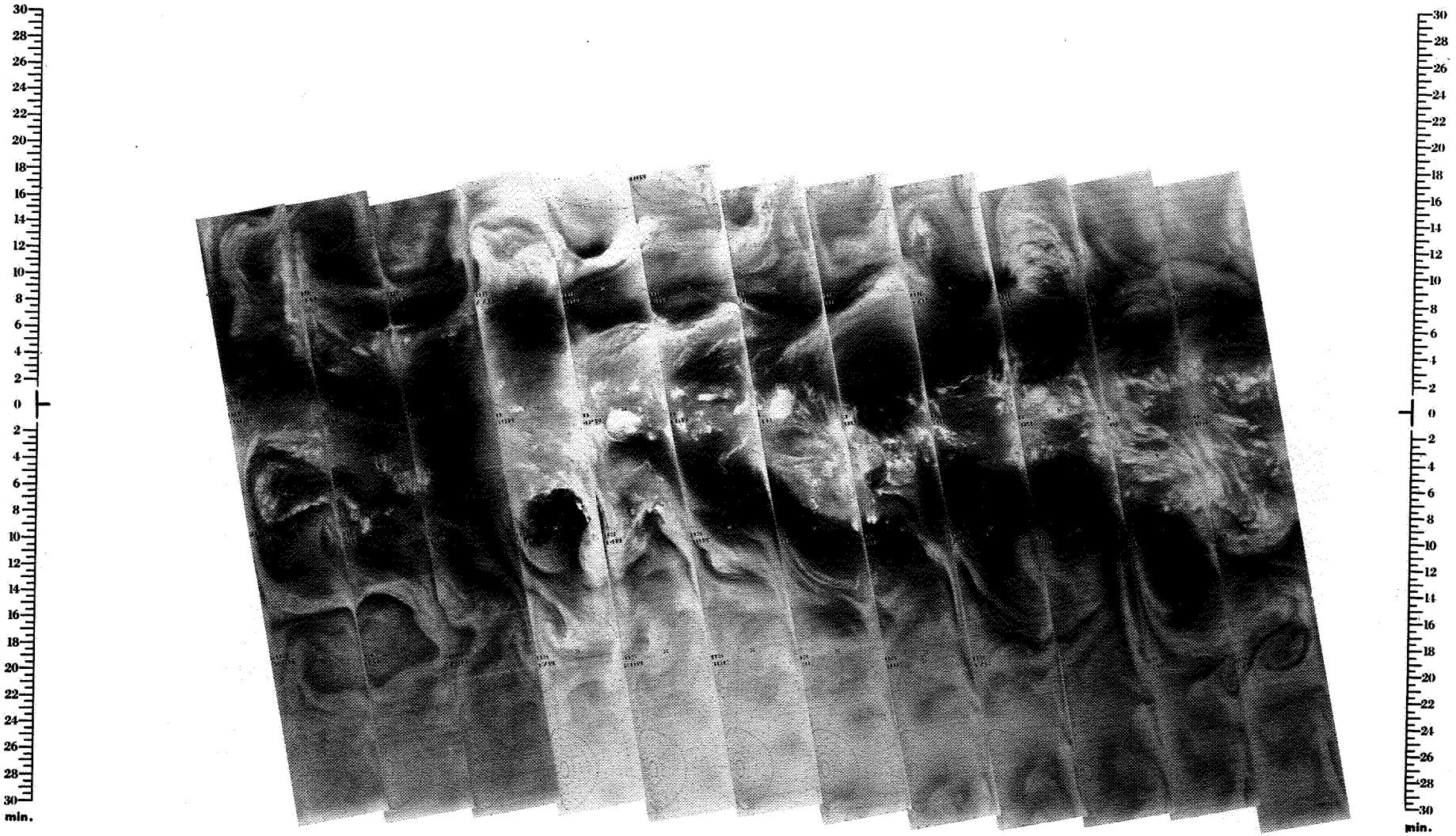
6.7 μm



5526 5525 5524 5523 5522 5521 5520 5519 5518 5517 5516 5515 5514 5513

26 JANUARY 1974

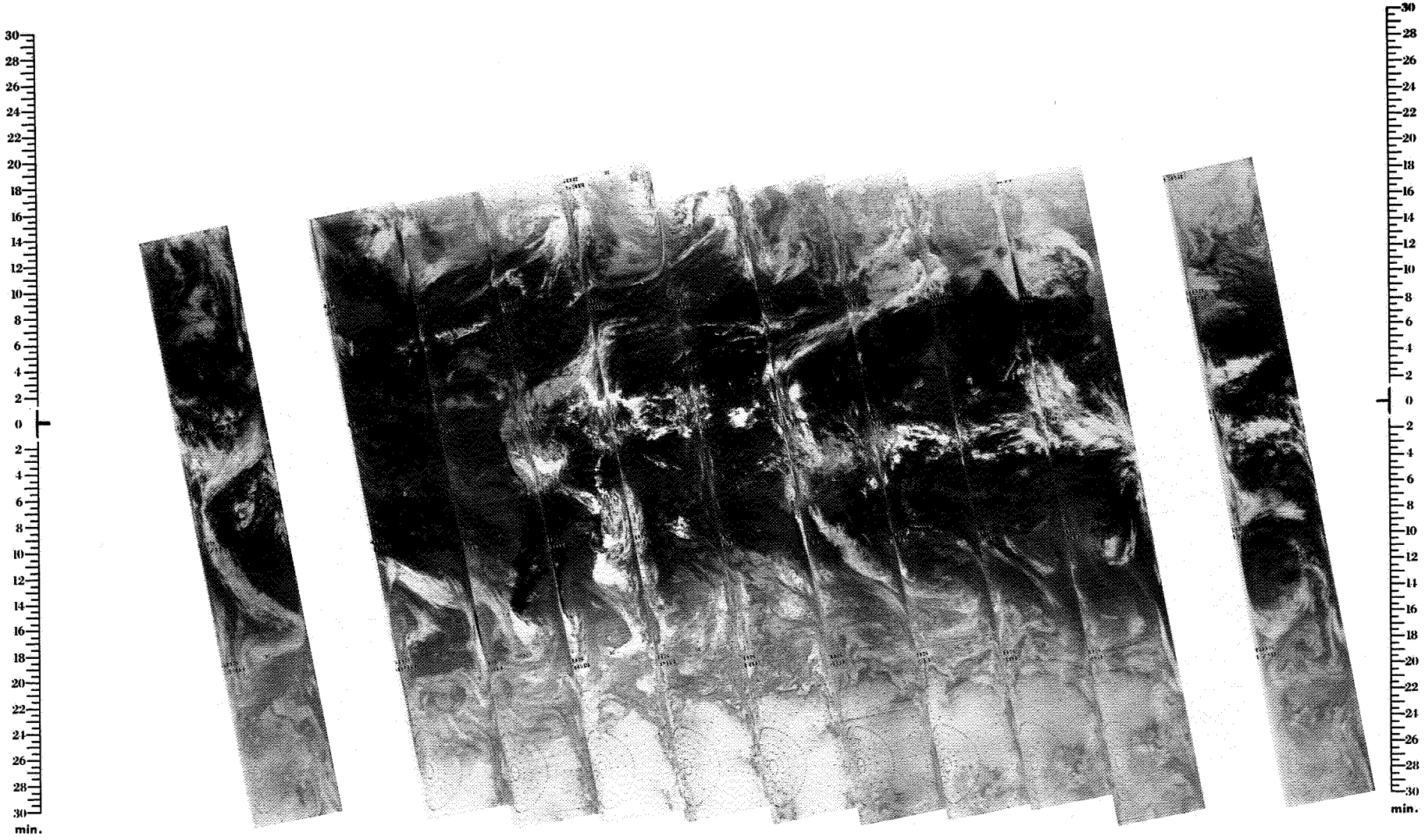
11.5 m



5526 5525 5524 5523 5522 5521 5520 5519 5518 5517 5516 5515 5514 5513

26 JANUARY 1974

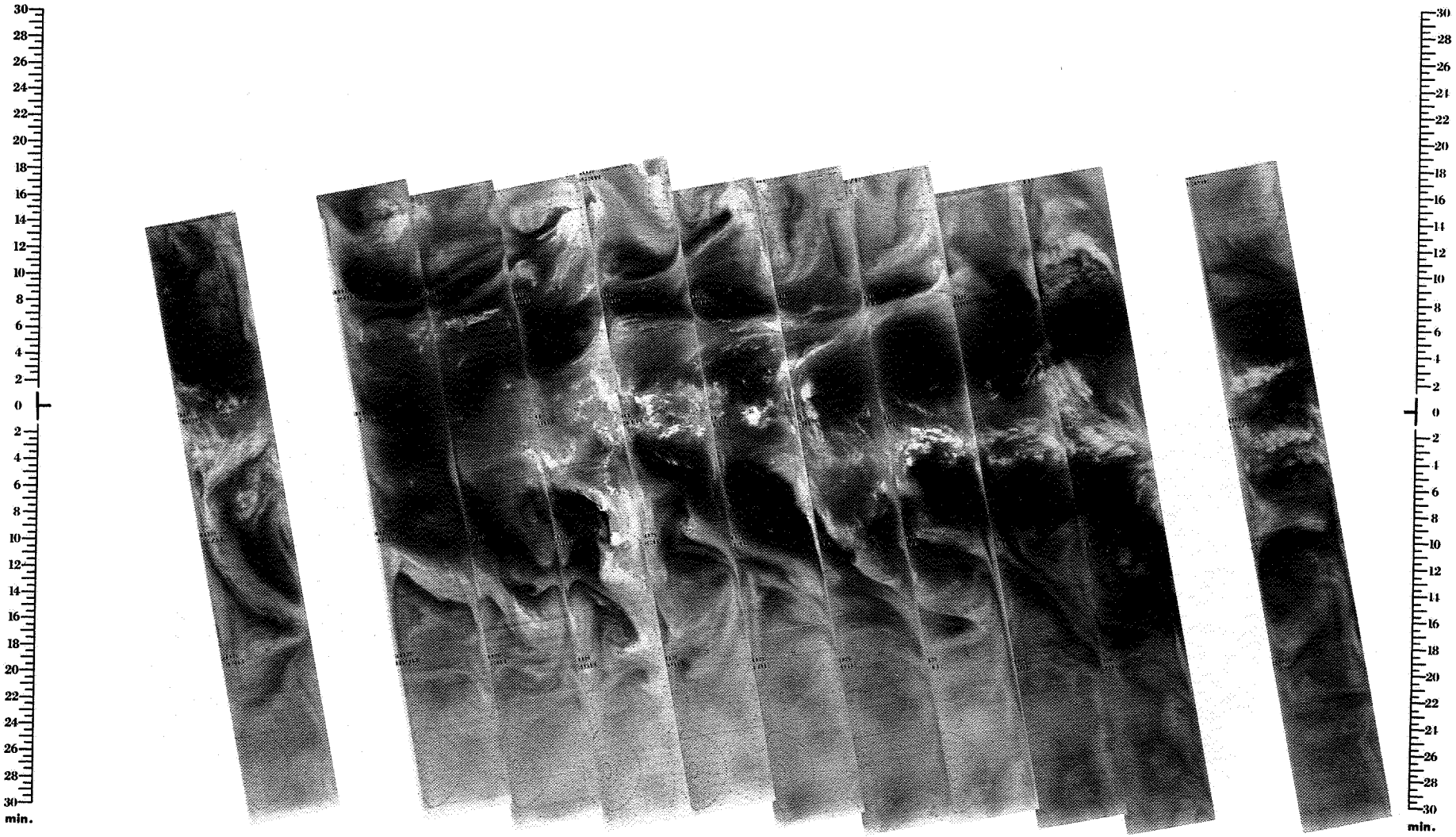
6.7 μm



5539 5538 5537 5536 5535 5534 5533 5532 5531 5530 5529 5528 5527

27 JANUARY 1974

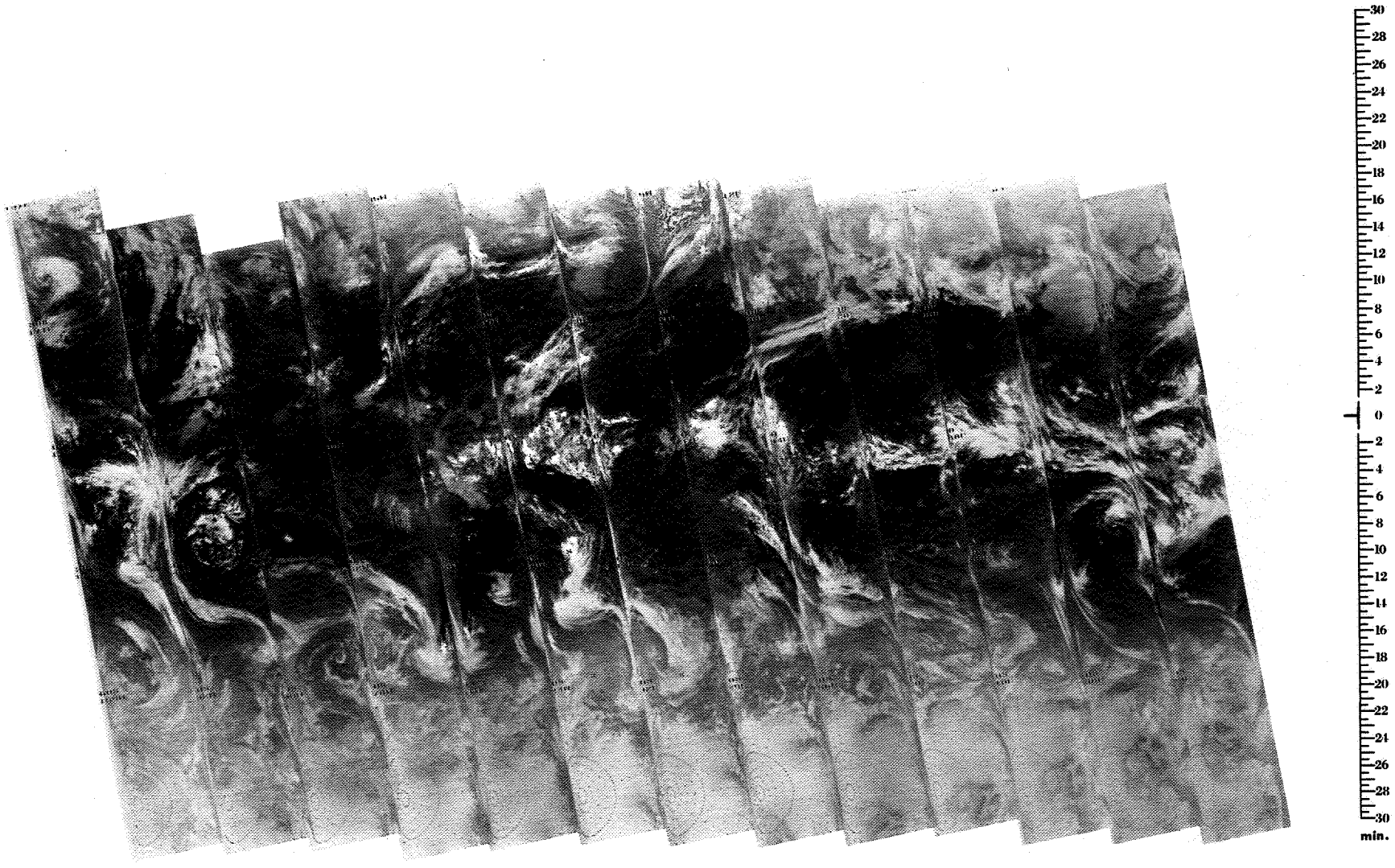
11.5 μm



5539 5538 5537 5536 5535 5534 5533 5532 5531 5530 5529 5528 5527

27 JANUARY 1974

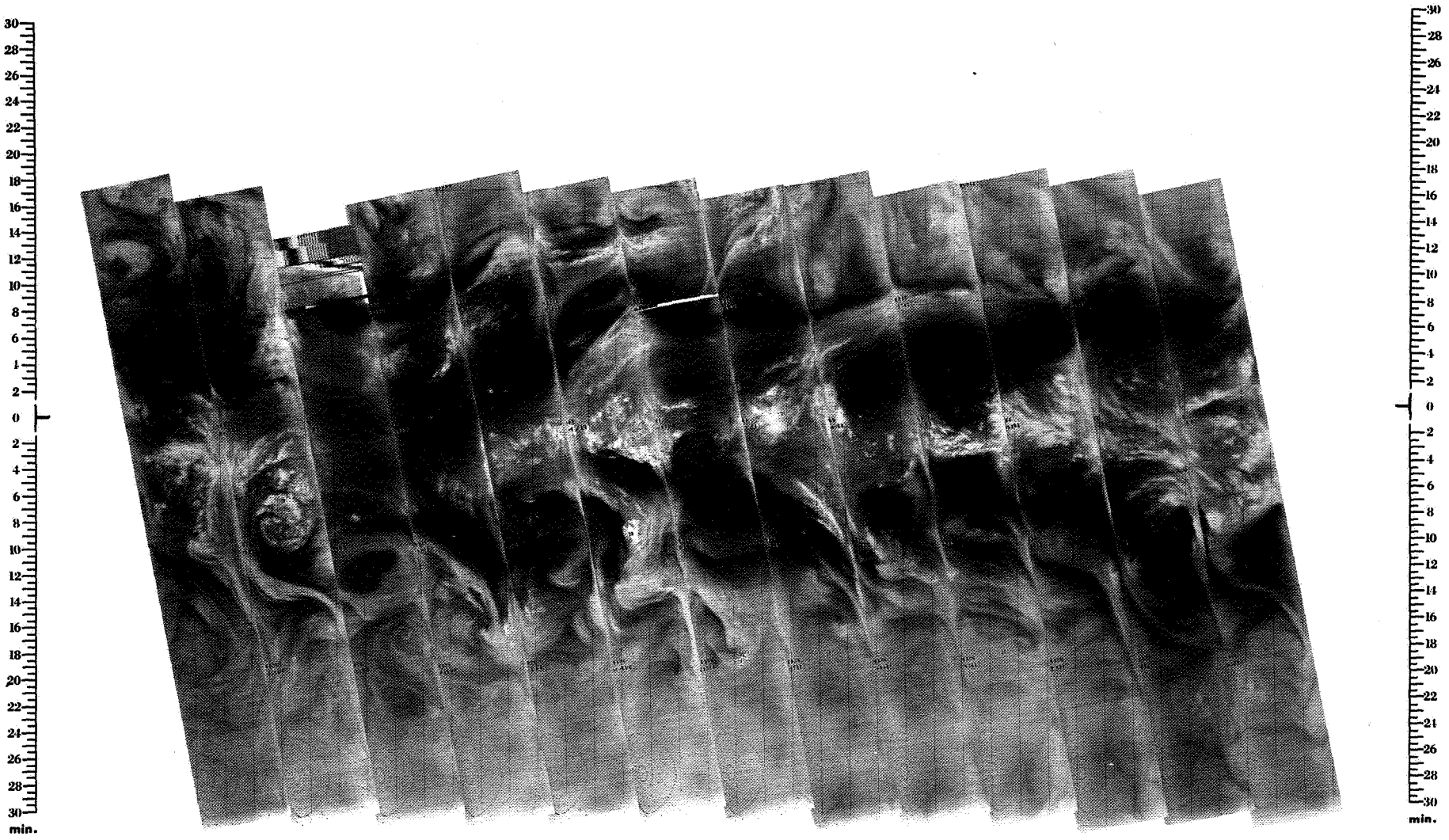
6.7 μm



5553 5552 5551 5550 5549 5548 5547 5546 5545 5544 5543 5542 5541 5540

28 JANUARY 1974

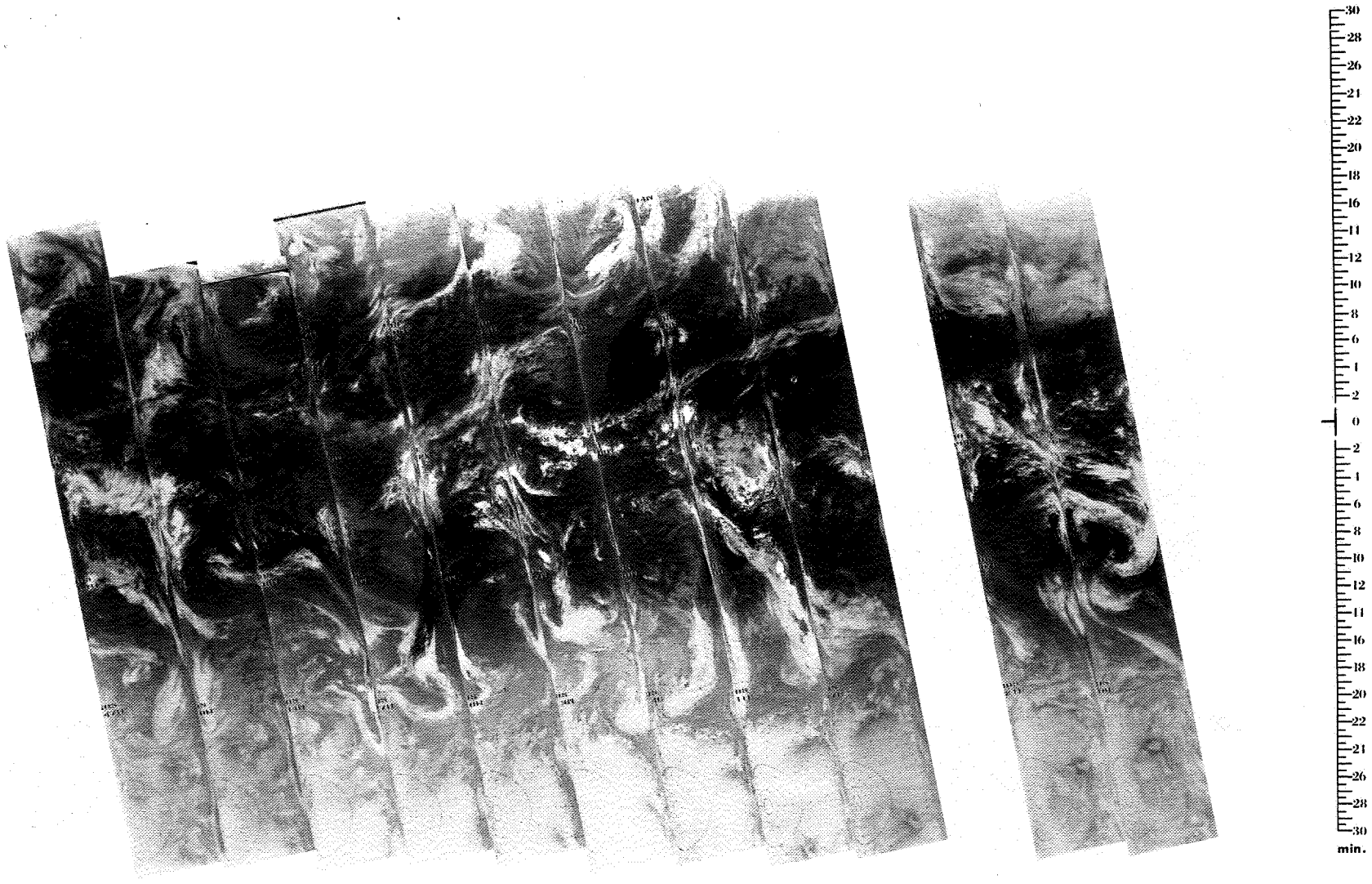
11.5 μm



5553 5552 5551 5550 5549 5548 5547 5546 5545 5544 5543 5542 5541 5540

28 JANUARY 1974

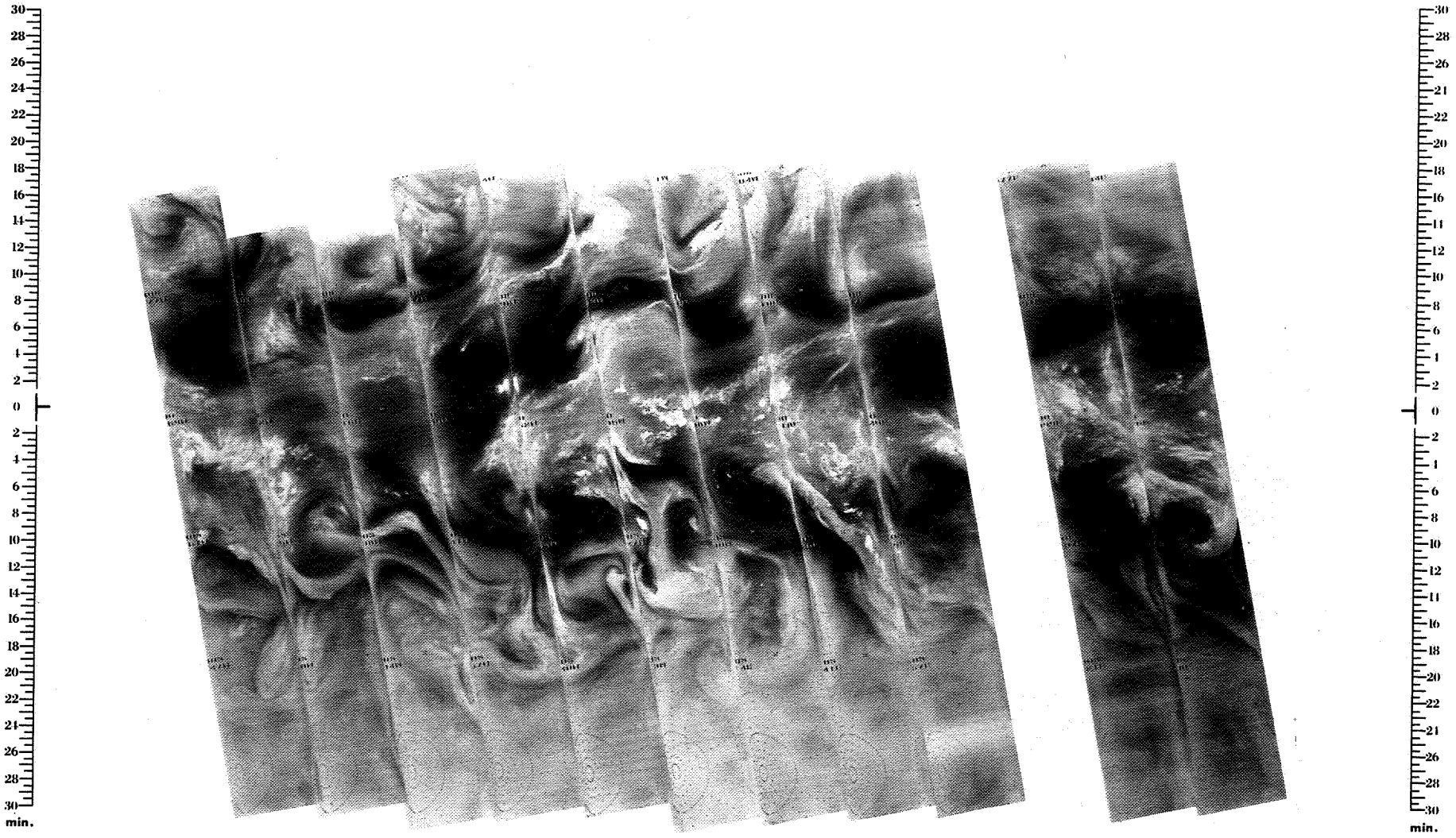
6.7 μm



5566 5565 5564 5563 5562 5561 5560 5559 5558 5557 5556 5555 5554

29 JANUARY 1974

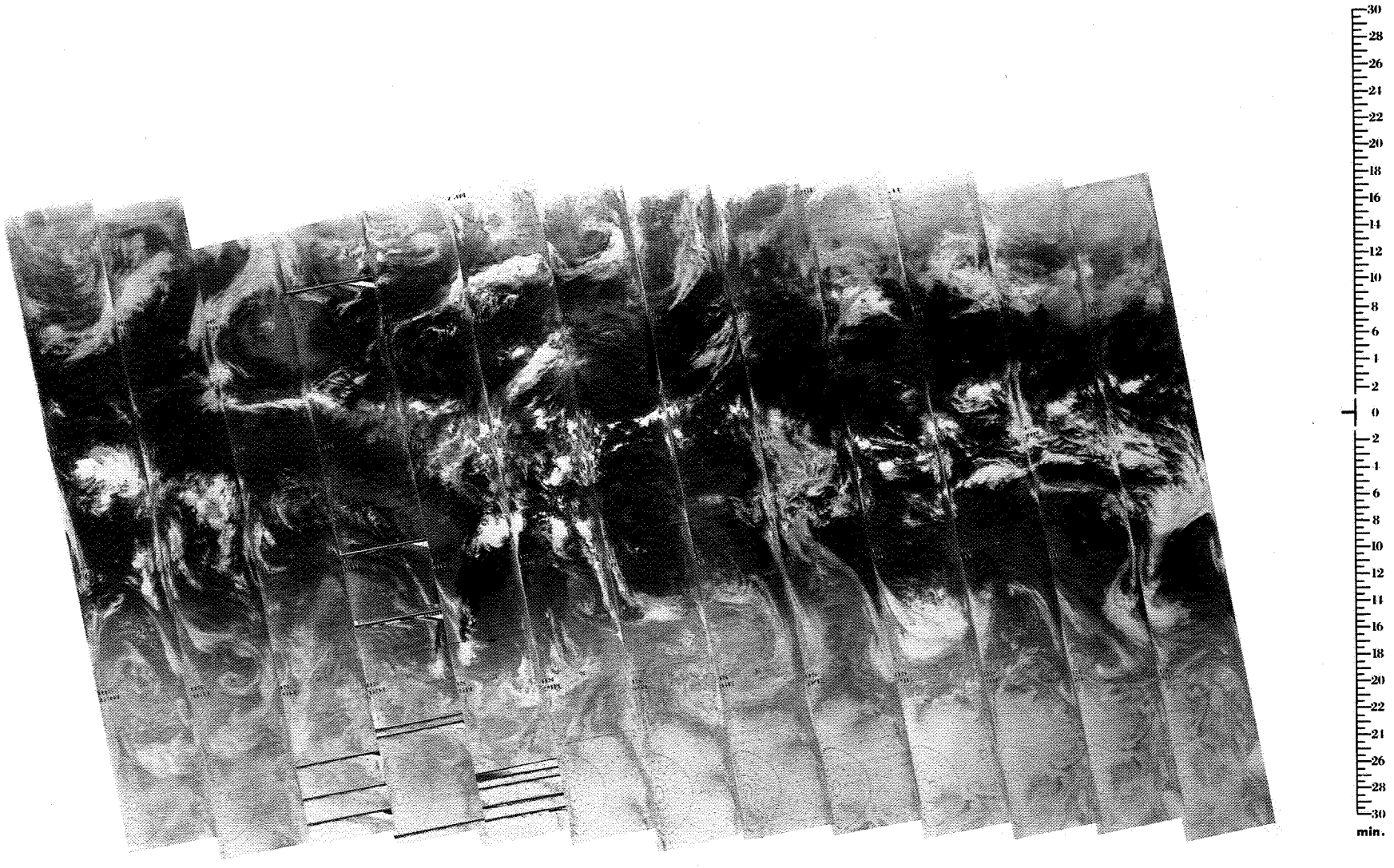
11.5 μm



5566 5565 5564 5563 5562 5561 5560 5559 5558 5557 5556 5555 5554

29 JANUARY 1974

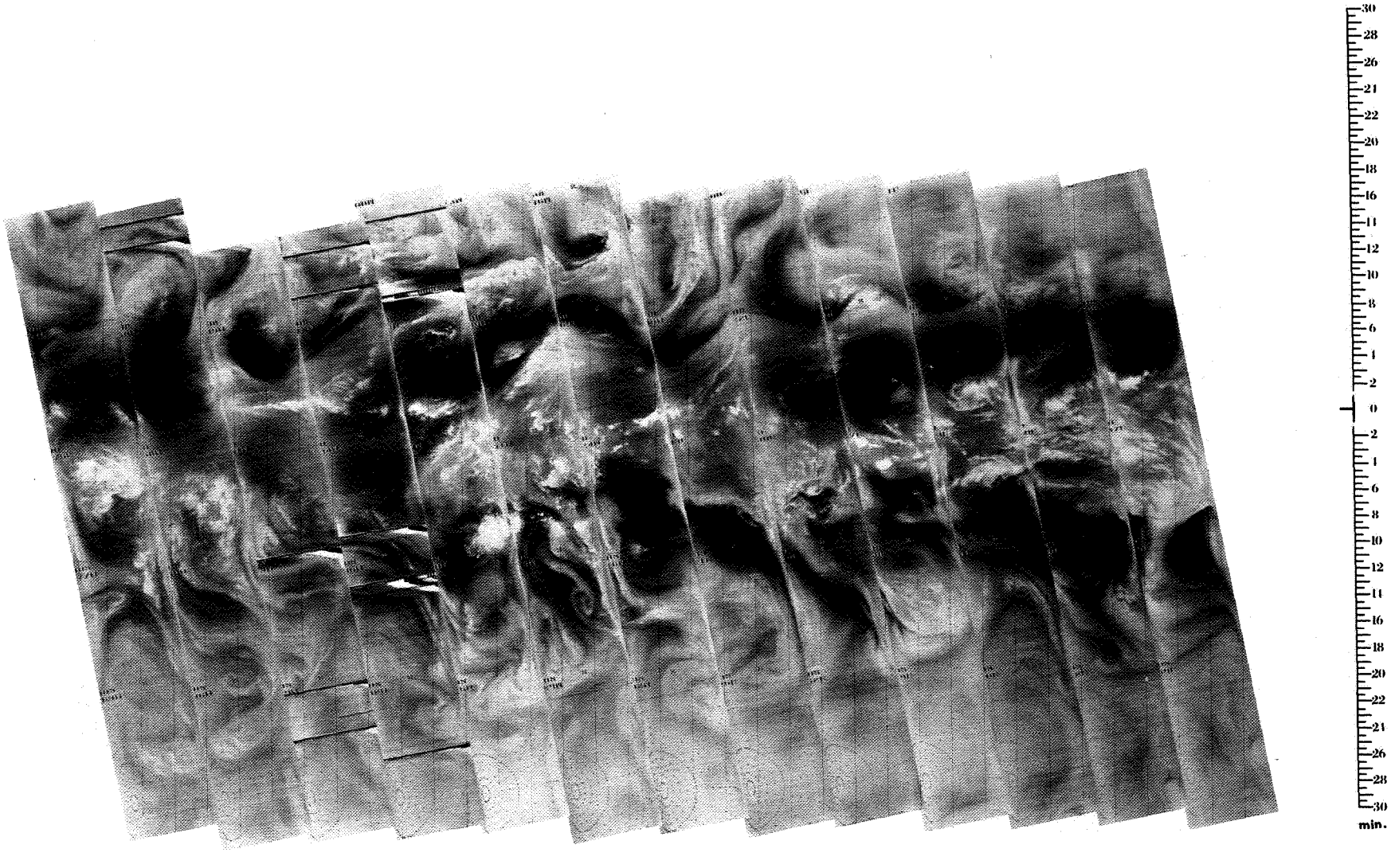
6.7 μm



5580 5579 5578 5577 5576 5575 5574 5573 5572 5571 5570 5569 5568 5567

30 JANUARY 1974

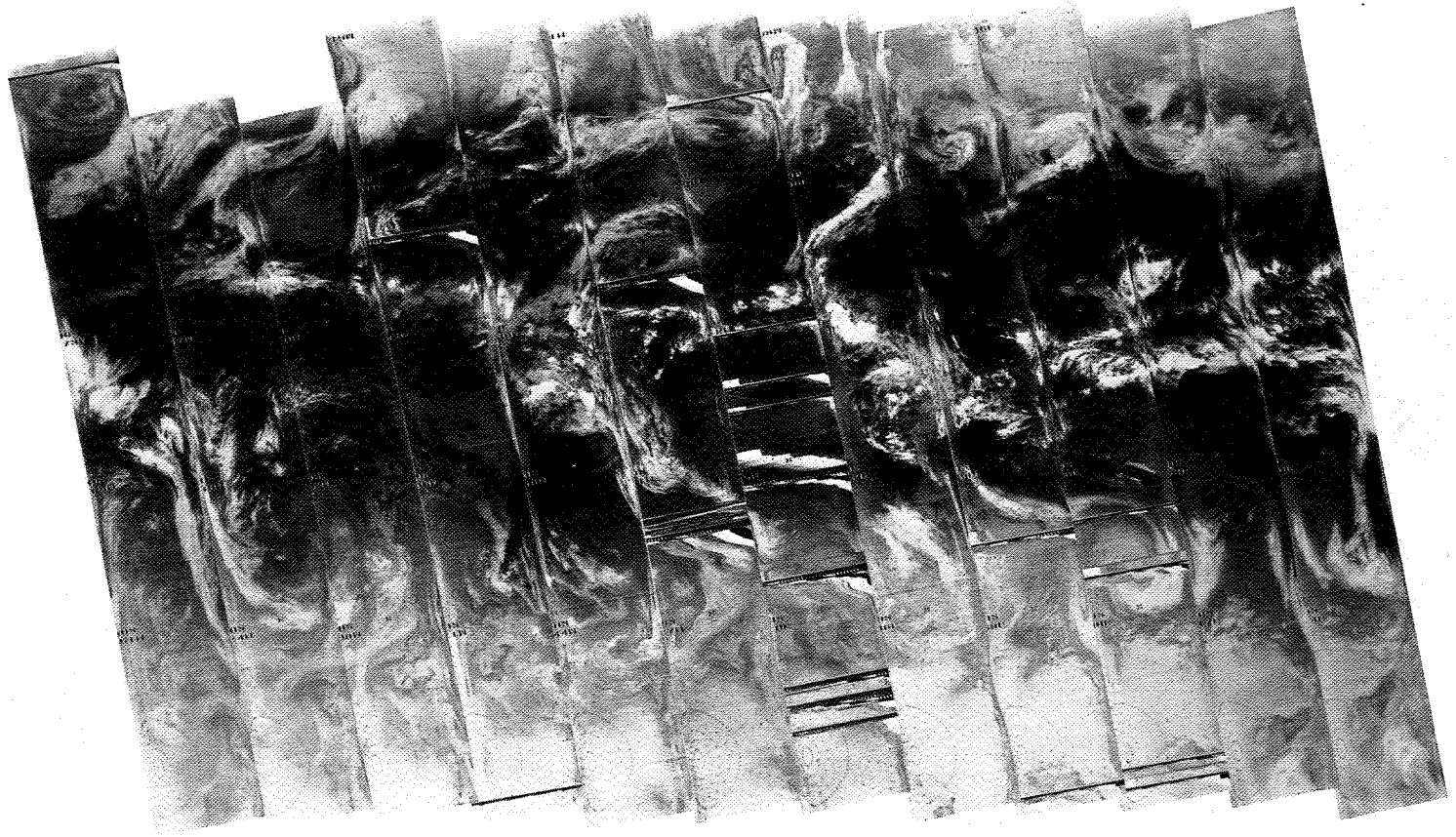
11.5 μm



5580 5579 5578 5577 5576 5575 5574 5573 5572 5571 5570 5569 5568 5567

30 JANUARY 1974

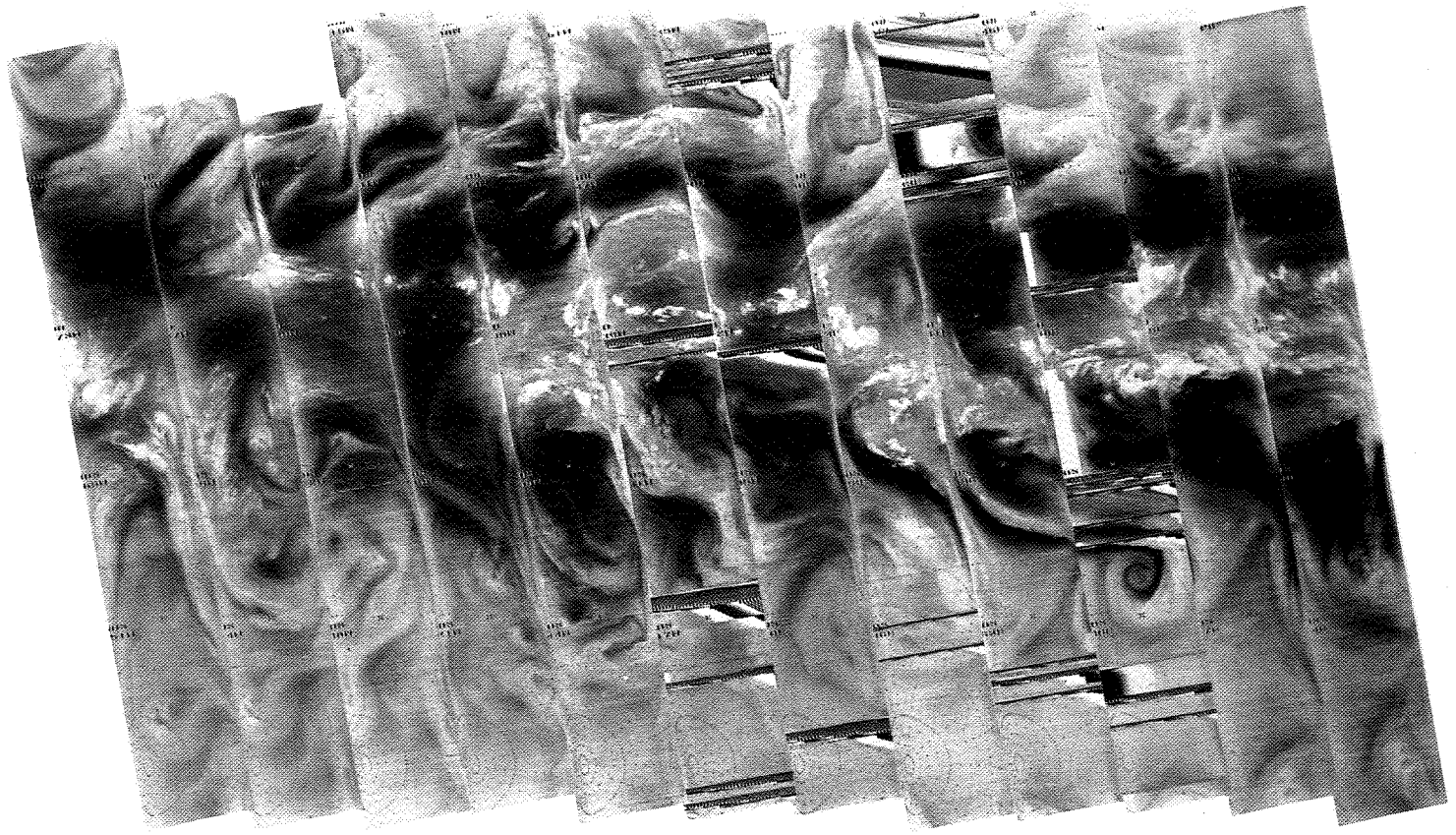
6.7 μm



5593 5592 5591 5590 5589 5588 5587 5586 5585 5584 5583 5582 5581

31 JANUARY 1974

11.5 μm



5593 5592 5591 5590 5589 5588 5587 5586 5585 5584 5583 5582 5581

31 JANUARY 1974

6.7 μm

SECTION 5

CORRECTIONS TO THE NIMBUS 5 USER'S GUIDE

This section presents all corrections or additions to The Nimbus 5 User's Guide which now are known to be necessary. If additional corrections are required, they will appear in a subsequent catalog. All previous corrections will be carried forward cumulatively into each new catalog.

5.1 THIR Corrections to the User's Guide

Table 5-1
(First presented in Volume 1)

This table replaces Table 2-3 (page 31) in The Nimbus 5 User's Guide.

Table 2-3

THIR Ouptut Voltages Versus Equivalent Blackbody Temperatures at Different Bolometer Temperatures for the 11.5μm Channel

Blackbody Temperature (°K)	Bolometer Temperature (°C) 0	10	20	30	40
0*	-0.405	-0.407	-0.413	-0.421	-0.425
180	-0.618	-0.617	-0.617	-0.617	-0.606
190	-0.711	-0.709	-0.706	-0.702	-0.685
200	-0.829	-0.825	-0.820	-0.811	-0.786
210	-0.976	-0.970	-0.961	-0.946	-0.911
220	-1.153	-1.144	-1.130	-1.109	-1.062
230	-1.363	-1.351	-1.332	-1.302	-1.240
240	-1.606	-1.591	-1.565	-1.526	-1.448
250	-1.886	-1.867	-1.834	-1.783	-1.686
260	-2.202	-2.178	-2.137	-2.074	-1.955
270	-2.555	-2.526	-2.476	-2.399	-2.256
280	-2.946	-2.911	-2.851	-2.759	-2.589
290	-3.375	-3.334	-3.262	-3.153	-2.954
300	-3.841	-3.793	-3.709	-3.582	-3.352
310	-4.345	-4.289	-4.192	-4.045	-3.781
320	-4.886	-4.822	-4.711	-4.543	-4.241
330	-5.463	-5.391	-5.264	-5.074	-4.733

*Space level

Table 5-2
(First presented in Volume 1)

This table replaces Table 2-4 (page 32) in The Nimbus 5 User's Guide.

Table 2-4

THIR Output Voltages Versus Equivalent Blackbody Temperatures at Different Bolometer Temperatures for the 6.7 m Channel

Blackbody Temperature (°K)	Bolometer Temp. (°C)				
	0	10	20	30	40
0*	-0.507	-0.518	-0.532	-0.556	-0.576
180	-0.607	-0.618	-0.632	-0.655	-0.674
185	-0.644	-0.654	-0.669	-0.692	-0.710
190	-0.692	-0.702	-0.716	-0.739	-0.756
195	-0.752	-0.762	-0.776	-0.798	-0.814
200	-0.827	-0.838	-0.851	-0.873	-0.888
205	-0.921	-0.931	-0.944	-0.966	-0.978
210	-1.035	-1.045	-1.058	-1.078	-1.089
215	-1.172	-1.182	-1.195	-1.215	-1.223
220	-1.337	-1.347	-1.359	-1.379	-1.383
225	-1.533	-1.543	-1.554	-1.573	-1.573
230	-1.764	-1.774	-1.784	-1.801	-1.797
235	-2.033	-2.043	-2.052	-2.068	-2.059
240	-2.350	-2.355	-2.363	-2.378	-2.362
245	-2.704	-2.714	-2.721	-2.734	-2.711
250	-3.115	-3.125	-3.131	-3.142	-3.111
255	-3.582	-3.592	-3.597	-3.605	-3.565
260	-4.110	-4.119	-4.122	-4.127	-4.077
265	-4.704	-4.714	-4.715	-4.717	-4.656
270	-5.367	-5.378	-5.376	-5.375	-5.300

*Space level

The following information supplements that in paragraph 2.4.1.2 (page 34) in The Nimbus 5 User's Guide. (First presented in volume 5)

Beginning with orbit 3581 (4 September 1973), the ten-step gray scale will no longer be attached to each orbit of 70mm archival film. However, one gray scale will be attached at the beginning and end of each reel of archival film. A user who requests THIR imagery recorded after orbit 3581 will be furnished a gray scale wedge only if he specifically requests it.

5.2 SCMR Corrections to the User's Guide

There are no SCMR corrections to the User's Guide.

5.3 ESMR Corrections to the User's Guide (First presented in Volume 3)

The following information replaces the next to the last paragraph on page 103 (Section 4, 4.5) of The Nimbus 5 User's Guide.

ESMR grid print maps of calibrated brightness temperatures are available from NSSDC in three different map projections. These are: (1) Polar stereographic, (2) Mercator, and (3) Horizontal stereographic (Bull's-eye). Program options permit contouring of the grid print maps, printing of map titles, and using fewer than the full 78 beam positions.

For each map requested, the following information is needed:

- Satellite and sensor
  Nimbus 5 ESMR

- Map type
  1. Polar stereographic
  2. Mercator
  3. Horizontal stereographic (Bull's-eye)

- Map scale
  Scale of map in millions

- Geographic area
  1. For a Polar stereographic map specify - latitude of map perimeter, and orientation of 0° meridian line. The standard position for the 0° meridian on a northern hemisphere map is 10° clockwise below a left-right horizontal line through the map's pole.

     On a southern hemisphere map, 0° meridian is 10° counterclockwise below a left-right horizontal line through the map's pole. For other orientations of the 0° meridian, the user must specify, preferably with a sketch, the orientation desired.

  2. For a Mercator map specify - latitude of upper and lower edges of map, and longitudes of left and right edges of map. Longitudes are measured west from Greenwich (0°).

  3. For a Horizontal stereographic (Bull's-eye) map specify - latitude and longitude (west from Greenwich) of map center, pseudo co-latitude of

map perimeter (number of degrees of latitude from map center), and azimuth of 0° longitude line. If not specified, the azimuth will be located as it is for the Polar stereographic map.

- Calendar date of data requested
- Data orbit number(s)
- Beginning and end time (GMT) of the date for each map requested. These times are derived from information in Table 2-2 of each Nimbus 5 Data Catalog.

Optional specifications for each map are the following:

- ESMR beam parameters
  The user can specify, or limit, the range of beam positions used to produce each map. If no specifications are made, beam positions 1 through 78 are used.
- Map title
  For each map, the user may specify a title containing up to 70 characters.
- Contouring
  Normally, maps are printed without contours. To obtain contoured maps, the user must specify a contour base (or lower temperature limit e.g., 130°K) and a contouring interval (e.g., contour every 10°K). The contour program fills in the first contour interval above the contour base with the letter "A", the next interval is blank, the next is filled in with the letter "B", etc.

(The following was first presented in Volume 2.)

Table 4-4 of The Nimbus 5 User's Guide will not be supplied. Table 5-3, is to be used in its place.

As stated in The Nimbus 5 Data Catalog, vol. 1, the antenna properties changed after final calibration and rendered those numbers useless. The cause of the gross variations in antenna properties which were observed soon after launch has been determined to be a cross-polarized grating lobe. This finding has been confirmed through measurements on the engineering model and on the proto/flight model of the ESMR, and through theoretical calculations. The problem does not exist for the near-nadir beam positions, so those positions are unaffected. A quantitative discussion of this problem is included in the report of the Nimbus 5 ESMR Anomaly Review Committee.

Table 5-3

Constants for Linear Correction of Brightness Temperatures Corresponding to ESMR Beam Positions

Beam Position	A	B(°K)
1	1.058	4
2	1.027	10
3	.990	16
4	.980	14
5	.963	17
6	.987	15
7	.970	17
8	.961	19
9	.969	18
10	.980	16
11	.980	17
12	1.018	10
13	.999	12
14	.989	13
15	.975	15
16	.974	15
17	.994	10
18	1.026	8
19	1.038	5
20	1.018	13
21	1.034	13
22	1.099	4
23	1.082	9
24	1.048	8
25	.986	12
26	.960	10
27	.941	11
28	.947	10
29	.937	11
30	.942	10
31	.963	6
32	1.003	-3
33	1.002	-3
34	.976	1
35	.988	-1
36	1.004	0
37-42	1.000	0
43	1.002	-3

Table 5-3 (Continued)

Beam Position	A	B(°K)
44	.962	4
45	.960	4
46	.980	2
47	.966	4
48	.966	6
49	.948	10
50	.949	10
51	.934	12
52	.945	13
53	.988	11
54	1.019	11
55	1.041	11
56	1.049	14
57	1.042	15
58	1.019	16
59	1.015	15
60	1.012	12
61	.993	13
62	.976	15
63	.998	12
64	.983	14
65	.998	14
66	.970	19
67	.982	18
68	.980	19
69	.955	24
70	.974	22
71	.941	26
72	.969	22
73	.949	30
74	.967	22
75	.956	27
76	.959	28
77	.969	26
78	1.030	13

An empirical calibration has been developed which removes the effect of the lobe structure and antenna loss, which vary with position, and roughly corrects for angular variations in viewing geometry. In this calibration scheme the antenna loss radio is assumed to be 1.56 for all temperatures and beam postions, and a linear correction is applied to the data. The correction is given by:

$$T_i' = A_i T_i + B_i$$

where T_i' is the corrected brightness temperature for the i-th beam position and T_i is the brightness temperature calculated with the assumption of a constant antenna loss. A_i and B_i are empirically derived constants given in Table 5-3.

5.4 ITPR Corrections to the User's Guide

The following tables replace Table 5-3 of The Nimbus 5 User's Guide.

Table 5-4
(First presented in volume 1)

ITPR Calibration Constants for the Period 12/12/72 - 2/6/73

$R_s = a_0 + a_1 V$
R_s = radiance of the scene (mw/m^2 ster cm^{-1})
V = digital counts

Channel	a_0*	a_1
1	1.0495	-0.001773
2	141.78	-0.1813
3	166.93	-0.2046
4	173.02	-0.2065
5	174.02	-0.1940
6	174.99	-0.1977
7	170.18	-0.1995

*The calibration constant a_0 now includes the radiance of the chopper reference blackbody.

Table 5-5
(First presented in volume 2)

ITPR Calibration Constants for the Period 2/7/73 - 3/31/73

$R_s = a_0 + a_1 V$
R_s = radiance of the scene (mw/m^2 ster cm^{-1})
V = digital counts

Channel	a_0*	a_1
1	1.061	-0.001782
2	141.775	-0.1801
3	166.840	-0.2037
4	172.974	-0.2054
5	174.034	-0.1931
6	175.040	-0.1963
7	170.288	-0.1988

*The calibration constant a_0 now includes the radiance of the chopper reference blackbody.

Table 5-6
(First presented in volume 3)

ITPR Calibration Constants for the Period 4/1/73 - 5/31/73

$R_s = a_0 + a_1 V$
R_s = radiance of the scene (mw/m^2 ster cm^{-1})
V = digital counts

Channel	a_0*	a_1
1	1.056	-0.001783
2	141.6	-0.1815
3	166.8	-0.2057
4	173.0	-0.2068
5	174.0	-0.1946
6	174.9	-0.1976
7	170.1	-0.1987

*The calibration constant a_0 now includes the radiance of the chopper reference blackbody.

Table 5-7
(First presented in volume 4)

ITPR Calibration Constants for the Period 6/1/73 - 7/31/73

$R_s = a_0 + a_1 V$
R_s = radiance of the scene (mw/m^2 ster cm^{-1})
V = digital counts

Channel	a_0*	a_1
1	1.049	-0.001758
2	141.8	-0.1820
3	166.8	-0.2061
4	173.1	-0.2072
5	174.1	-0.1954
6	175.2	-0.1982
7	170.3	-0.1985

*The calibration constant a_0 now includes the radiance of the chopper reference blackbody.

The following are changes to the ITPR material in Section 5 of The Nimbus 5 User's Guide: (First presented in Volume 2)

- The table, Nimbus 5 Compacted Data Format, at the bottom of page 125 should read:

Word	Format	Description
1	I	GMT (seconds)
2	Spec 1	Julian Day and Year
3 - 162	Spec 2 (F1, F3)	Calibrated IR Data
163 - 182	F1	Latitude
183 - 202	F1	Longitude
203 - 222	F1	Zenith
223	I	Grid Type (0 = Nadir) (1, 2, or 3 = Scan)
224 - 225	-	Zero Fill

- On page 126 in the paragraph describing Spec 2, the last two lines of that paragraph should read:

". . . 4-word pattern will be repeated thru word 162, resulting in 40 sets or IR measurements."

- The next paragraph (on page 126, after description of Spec 2) should read:

  "Each data record will contain 5 major frames of data (225 24-bit words for each major frame) with a total of 1125 24-bit words, or 450 60-bit words. Because major frames will contain either 34, 36 or 40 earth views for each channel, there will be zero fill in the IR data words when 34 or 36 views are present, and the corresponding latitudes and longitudes will be fictitious. This applies also to data samples which occur during retrace. Zero fill will be used to produce the constant-length record when the number of major frames in a day is not a multiple of 5."

- In the next paragraph the following changes should be made:

  Line 1: ". . . with a density of 556 6-bit bytes . . ."
  should read: ". . . with a density of 800 6-bit bytes . . ."

  Line 3: ". . . per day at 320 major frames . . . about 640 records"
  should read: ". . . per day at 400 major frames . . . about 960 records"

  Line 4: ". . . will contain about 5 days . . ."
  should read: ". . . will contain about 4 days . . ."

5.5 SCR Corrections to the User's Guide

The following information supplements the SCR information in the User's Guide and has been derived from post-launch information. (First presented in volume 3)

The filters of the A and B channels have minor leaks at short wavelengths. Corrections for these leaks are made using the radiance measured by channel C4 (11.5μm window channel) in the equation,

$$R_i = R_i (1 + \gamma_i) - a_i \gamma_i C_4 ,$$

where R_i is the measured channel i Radiance and R_i is the corrected radiance. Table 5-7 gives values of γ and $a\gamma$ for the A channels and channel B4. Corrections are of order 1-2 radiance units (mw/m^2 ster cm^{-1}) for the A channels. This is small compared with typical measured radiances of 80 units, but still 5-10 times larger than the rms noise. The correction to B4 is normally about 5 radiance units.

The B difference channels are not affected by leaks since the differencing operation causes the leaks to cancel exactly. The equation

$$R_{ij} = R_i + (R_i - R_j)\beta_{ij} ,$$

where R_{ij} is the calculated channel B_{ij} radiance and R_i is the measured channel Bi radiance, is used to derive the B difference channel radiances (B12, B23, and B34) from the measured B channel radiances (B1, B2, B3, and B4). Table 5-8 gives the coefficients β_{ij}.

Table 5-8

Correction Coefficients γ and $a\gamma$ for the SCR Temperature Sounding Channels

Channel	γ	$a\gamma$
A1	.0305	.015
A2	.0235	.0105
A3	.0416	.0057
A4	.0595	.025
B4	.153	.0165

Table 5-9

SCR B Difference Channel Coefficients β

Channel	β
B12	9.50
B23	10.05
B34	4.83

Figure 5-1 gives the experimenter's current best estimates of the weighting functions of the A channels and B4, when corrected as above, and of the B difference channels. These channels measure emission from carbon dioxide in the ν_2 band near 15μm. The weighting functions were derived for a climatological mean temperature profile and, to a good approximation, are independent of temperature profile for the range of temperature which occurs in the atmosphere. These weighting functions are a compromise between theoretical computations, using spectral line parameters together with measured filter transmission profiles, and pre-launch test results for the flight instrument. This method is similar to that used for the Nimbus 4 SCR and was described in more detail by Barnett et al (1972).

5.6 NEMS Corrections to the User's Guide

There are no NEMS corrections to the User's Guide.

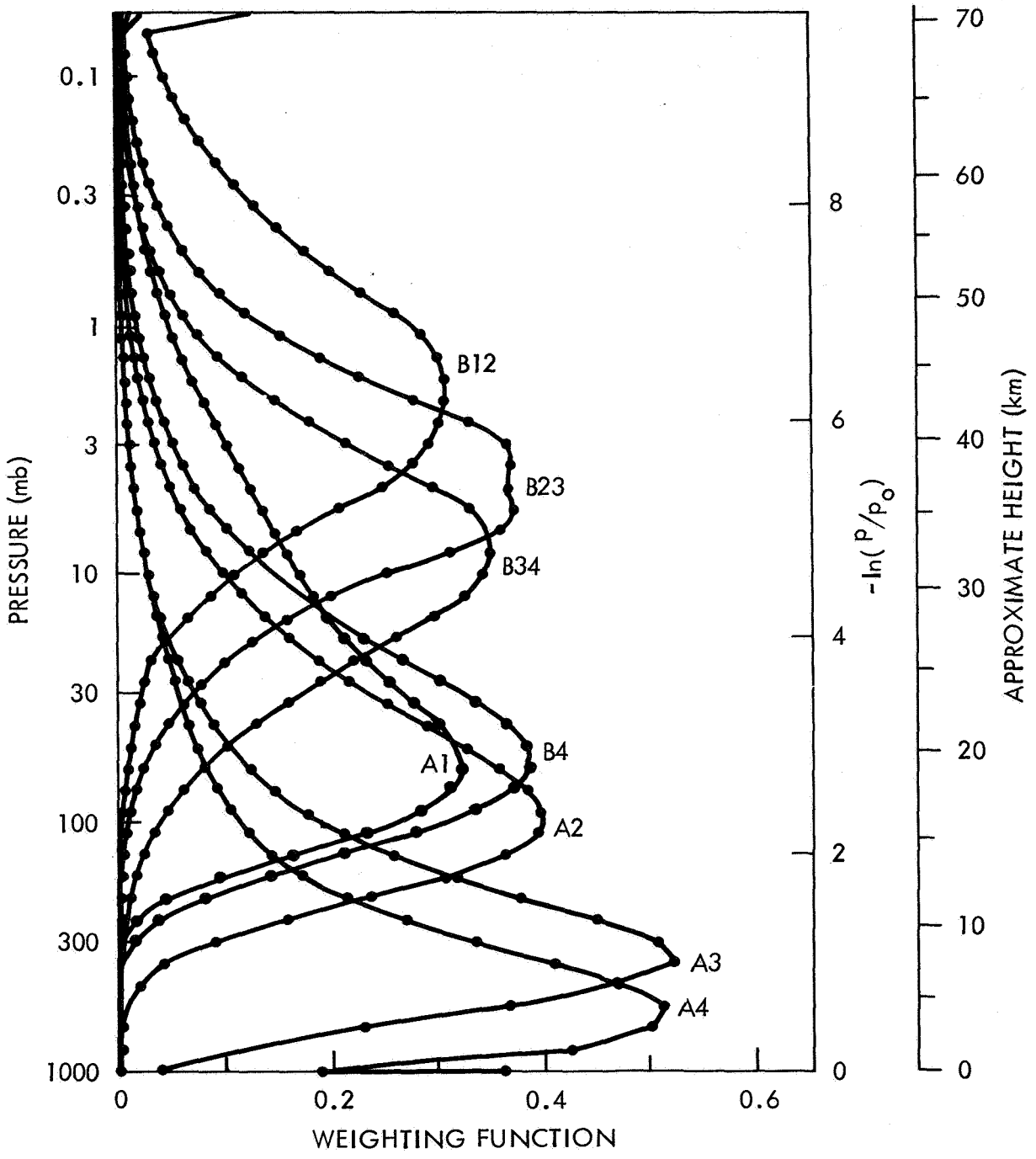
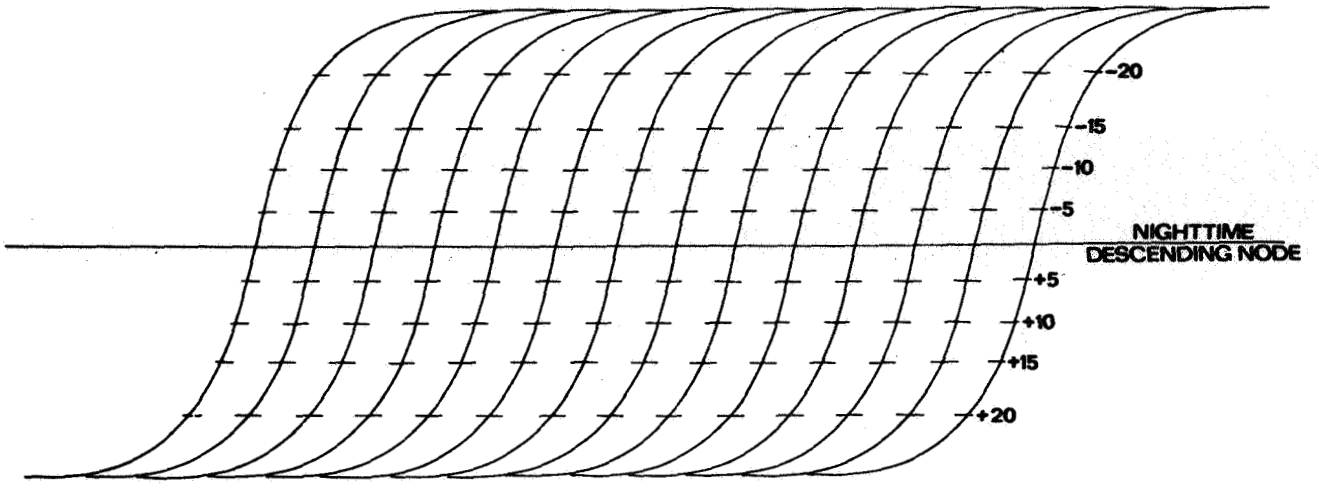
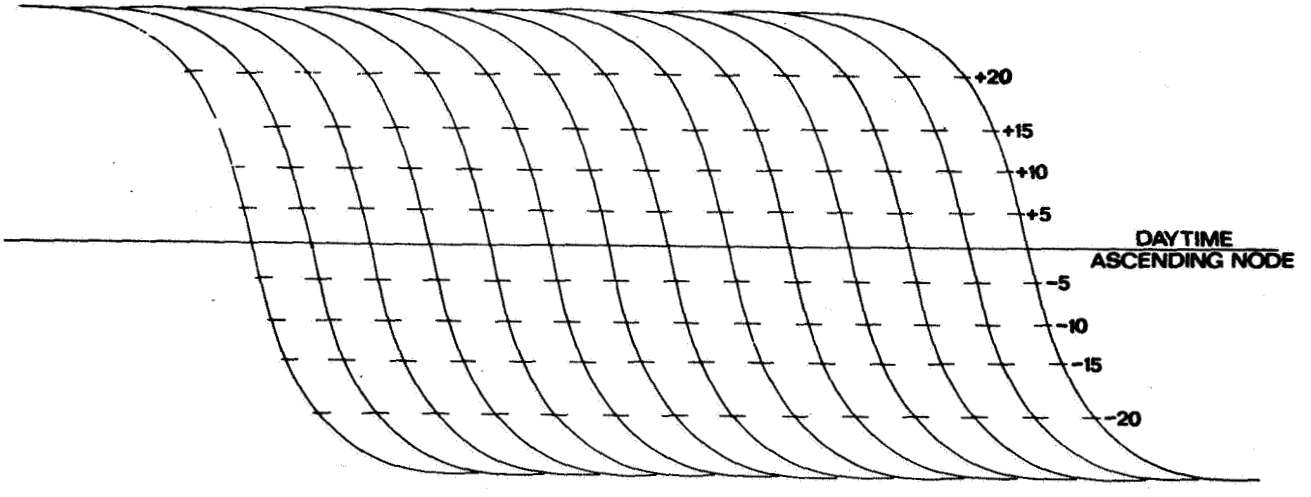


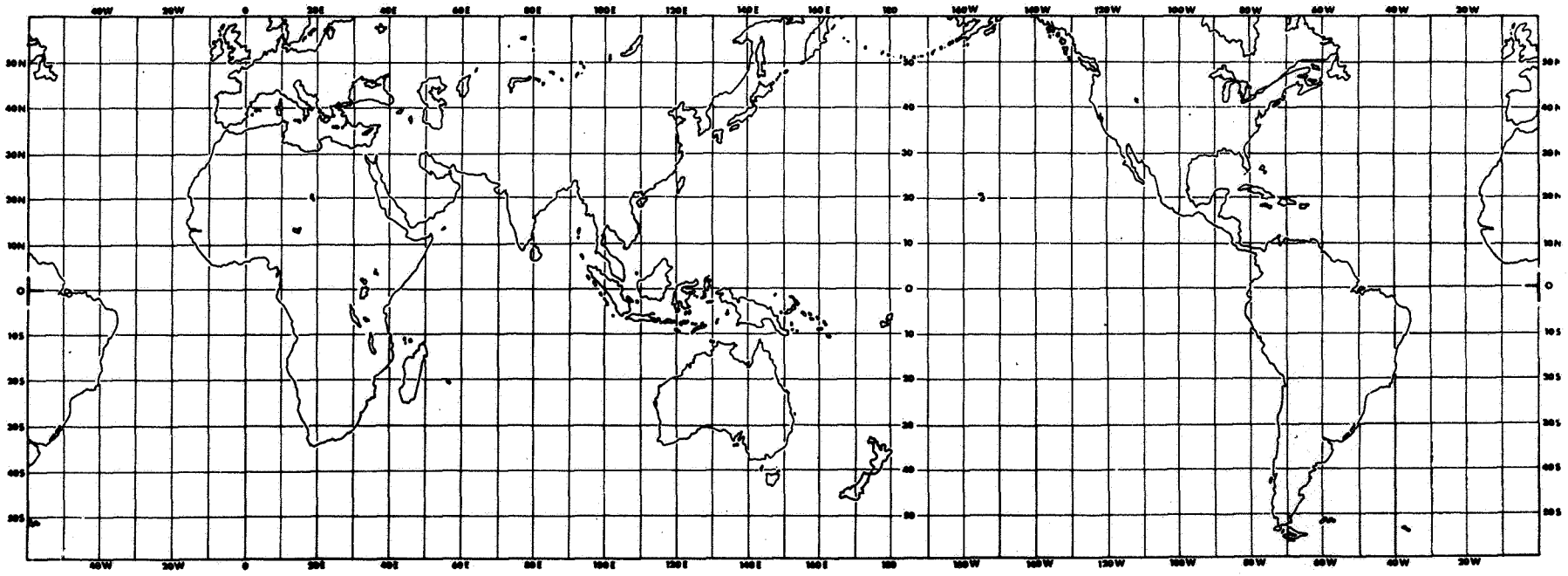
Figure 5-1. Weighting Functions of the Temperature Sounding Channels of the Nimbus 5 SCR. The height scale is approximate. The abscissa is a weighting function on an arbitrary scale.



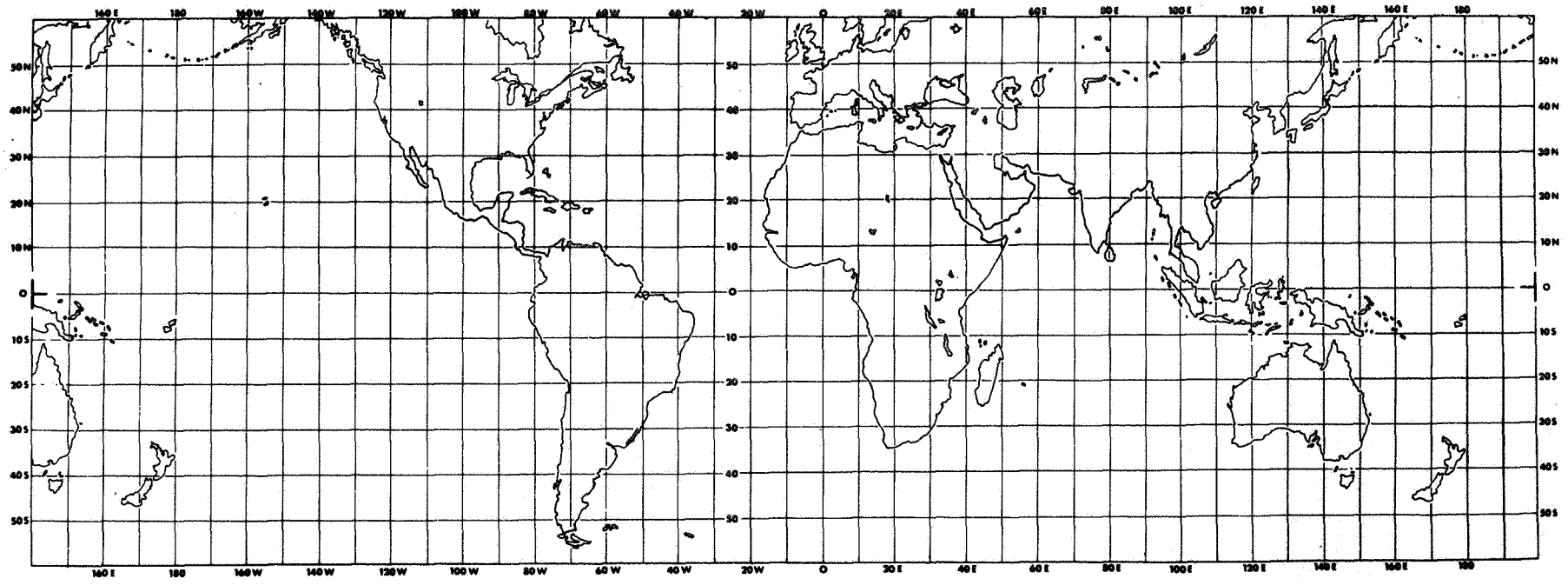
NIMBUS SUBSATELLITE TRACKS OVERLAY



NIMBUS SUBSATELLITE TRACKS OVERLAY



Location Guide
Average Scale for Nimbus
THIR Nighttime Montages



Location Guide
Average Scale for Nimbus
THIR Daytime Montages